

CITY OF MOUNTAIN VIEW

Finance and Administrative Services Department • Purchasing Division 500 Castro Street • Post Office Box 7540 • Mountain View, California 94039-7540 • 650-903-6324 • FAX 650-968-5472

NOVEMEBR 30, 2007

REQUEST FOR PROPOSALS FOR CLOSED CURCUIT TELEVISION SYSTEM, NO. R081211 – Revision 1

The City of Mountain View invites your submittal of a proposal to provide the above-referenced goods and/or services according to the attached specifications, terms and conditions. Please complete this proposal as instructed below and return to the City at the address specified below and by the date due for proposal submittals.

TO:

Chris Hartje, Supervising Buyer City of Mountain View 500 Castro Street Mountain View, CA 94041

or

P.O. Box 7540 Mountain View, CA 94039-7540

The undersigned proposes to furnish to the City of Mountain View goods and/or services as defined herein for the prices shown herein in accordance with the specifications, terms and conditions attached hereto.

This Request for Proposals includes the following sections:

Section 1: Instructions for Submitting Bids

Section 2: Terms and Conditions

Section 3: Specifications

Section 4: Attachments and Exhibits

INSTRUCTIONS FOR SUBMITTING RESPONSES

1.	Date Due: 4:00 PM, Thursday, December 20, 2007		
2.	Preproposal Conference/Walk-Through:		
	If required, the date, time and location of the preproposal conference/walk-through will be noted below. If required, the Vendor must attend the preproposal conference/walk-through to ensure that the Vendor is completely familiar with the work requested. The Administrative Services Manager may waive this requirement if, in the opinion of the Administrative Services Manager, the Vendor is familiar with the job.		
-	The preproposal conference/walk-through will be held from 10:00 a.m. to 12:00 p.m. on Thursday, December 13, 2007, beginning at the Mountain View Public Library, 585 Franklin Street, Mountain View, California.		

3. Questions: Call the person named above at (650) 903-6324 for questions regarding this proposal process, or call Bruce Barsi, Project Manager, at (650) 280-0251 for questions regarding the specifications and/or requirements.

4. Reply Format: The entire proposal form, including all attachments, must be returned by the due date to the above address. Vendors must submit three (3) copies of the proposal. Please minimize the bulk of your proposal by only submitting one (1) copy of standard brochures and materials. You are free to organize your proposal as you wish, as long as it includes the requested information and all of the forms included in this Request for Proposals (RFP) are completed as required. Vendors must number all pages of any attachments to the RFP and reference page and paragraph number of the RFP for all comments to the RFP. Vendors are asked to clearly identify any limitations or exceptions to the requirements inherent in this Request for Proposals. Alternative approaches will be given consideration if the approach clearly offers increased benefits to the City.

The proposal must include at least five (5) references of recent similar work experience, preferably for city governments. These references must include a contact person, phone number, length of time with the reference and brief description of the work/deliverables performed. The proposal must also include the Vendor's: most recent audited financial statements; number of years in business; description of any current ongoing litigation and who the litigation is with; number of employees in Northern California (listed by type of job category); business organization chart; ownership of your company; resumés of owner,

president and/or top managers; and particular information regarding the individual who will be responsible for the work/deliverables requested in this RFP.

5. Responsiveness and Selection Process: The decision for selection will be made on a combination of criteria, including: total cost (including ongoing operating costs) and proposed value; similar successful experience; project management approach; technical merit; documented experience of employees to be involved with this service; quality and completeness of proposal; proof of warranty and repair services; degree and number of exceptions to specifications; proof of equivalency; flexibility and ability to be proactive; Vendor's ability to start the required services in a timely fashion; perception of company stability; and, if requested, oral presentation and tour of current similar work sites.

The City reserves the right to reject any and all proposals or to waive any minor errors, discrepancies or irregularities. The selection will be at the discretion of the Administrative Services Manager and may be made in any manner that best meets the needs of the City.

6. Proposed Contract: If one of the attachments to this RFP is a proposed contract, then the City intends to use the contract form in awarding this RFP. Vendors should review the terms and conditions contained in the contract and must note any exceptions, additions or modifications they would propose. Blanket substitution of the Vendor's standard contract for the City's proposed contract will not be permitted. If there is no attachment of a proposed contract, then the City plans to use the terms and conditions listed herein. If the Vendor desires to include additional terms and conditions, those terms and conditions to be added must be included in the Vendor's proposal and must be in a format easily readable by the City, to be at least 12-point type in black ink on white paper.

TERMS AND CONDITIONS

	receipt of all goods and/or services and receipt of an approved invoice. Propayment may be made if any of the following options have been selected by City:			
		The City will pay eighty percent (80%) of the contract amount based upon operational completeness of all components of the project and receipt of an approved invoice. The balance will be paid within thirty (30) days, after thirty (30) continuous uninterrupted satisfactory days of operation and acceptance by the City.		
		The City will make monthly payments thirty (30) days after receipt of an approved invoice. Should the Vendor fail to provide the specified hours/service required on any specific day, those hours/services not provided may either be rescheduled at the City's discretion or deducted from the appropriate service period invoice using the additional service hourly rate(s) to calculate the deduction.		
		The City will pay twenty-five percent (25%) upon receipt of all hardware, forty percent (40%) upon successful installation, fifteen percent (15%) upon completion of all training and data conversion and the balance will be paid within thirty (30) days after thirty (30) continuous days of uninterrupted satisfactory performance and acceptance by the City.		
2.	Time of Delivery/Completion: Time is of the essence on this purchase order. Specifically, the portion of this project which is to be completed at the Library can be started now earlier than February 2, 2008, and must be completed no later than February 28, 2008. The Library is scheduled to be closed to the public during this time period for renovations. The Vendor shall deliver all of the goods or complete all of the services called for under this proposal within the number of working/calendar days or by the date specified for completion in this proposal,			

3. <u>Freight Charges</u>: All prices bid shall include all freight costs and ownership transfers to the City at the City's location and are F.O.B. destination to the designated locations. Freight, if quoted separately, shall be prepaid and added to the invoice with ownership transferring to the City when delivery is completed to the City's location.

Damages" if required below.

unless the delays are caused by the City or by acts of God. Failure to deliver on time shall be grounds for termination of this Agreement or invoke "Liquidated

4.	Liquidated Damages:			
	\boxtimes	Required		Not Required

If required, it is agreed by the Vendor that if the goods or services are not delivered complete, as called for in this proposal, damages will be sustained by the City, and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the City will sustain in the event of and by reason of such delay; and it is, therefore, agreed that the Vendor will pay to the City the sum of Three Hundred Fifty Dollars (\$350) per day for each and every calendar day's delay in finishing the work in excess of the number of working or calendar days prescribed or in excess of the date specified for completion or delivery of the goods or services, whichever is applicable in this Proposal; and the Vendor agrees to pay said liquidated damages as herein provided; and in case the same are not paid, agrees that the City may deduct the amount thereof from any moneys due or that may become due the Vendor under this proposal.

Partial payments paid to the Vendor after the scheduled completion dates shall not be constituted as a waiver of the City's right to assess liquidated damages.

- 5. Firm Prices: All quotes will be held firm for a minimum of thirty (30) days after the proposal due date listed above to allow adequate time for the City to consider each proposal and make an award. All blanks for unit price and total price shall be completed. Any discrepancy between the unit price and the extended or total price shall be determined by taking the lower price. Upon receipt of this proposal by the City, the Vendor shall be presumed to be thoroughly familiar with all the aspects of this proposal, including installation sites and all specifications and requirements of this proposal. The failure or omission to examine any location, equipment, form, instrument or document shall in no way relieve Vendor from any obligation in respect to this proposal.
- 6. Warranty: The delivered or installed goods, equipment or services shall be warranted to be free from defects in materials and workmanship. The warranty period shall begin upon acceptance by the City. As a minimum, all goods, equipment and services shall be warranted to operate satisfactorily in accordance with the requirements of these specifications, the representations of the Vendor and the published specifications of the manufacturer(s) for a period of at least one (1) year. Any defective goods, equipment or services shall be replaced or repaired within three (3) days at the City's location during the warranty period at no expense to the City.

7.	Prevailing Wages:			
	☐ Required ☐ Not Required			
	If required, notice is hereby given that the latest general prevailing rate of per diem wages, as determined by the Director or the Department of Industrial Relations, State of California, is to be paid to the various craftsmen and laborers employed in the construction of this project and is made a part of the specifications and contract for this project.			
	Reference is hereby made to copies of the general rate of per diem wages as determined by the Director of the Department of Industrial Relations on file in the Department of Public Works, City of Mountain View, which are available to any interested party.			
	For failure to pay the prevailing wages, the contractor shall forfeit, as a penalty, to the City, Fifty Dollars (\$50) for each workman for each calendar day or portion thereof who is paid less than the stipulated prevailing wage for work done under this contract, in violation of the provisions of the Labor Code, Sections 1770 to 1780, inclusive. In addition to said penalty, the contractor, or subcontractor, shall pay to each worker the difference between the prevailing wage and the amount paid to said worker for each calendar day for which said worker was paid less than the prevailing wage.			
8.	MSDS: General Industrial Safety Order 5195 requires Material Safety Data Sheets (MSDS) be supplied, for all applicable items, with the initial delivery.			
9.	<u>Licensed Contractor</u> : All contractors bidding on work requiring a State of California Contractor's License must state under penalty of perjury that they are a licensed contractor by listing their license number, date of expiration, type of license and description of that type of license. At a minimum, a Type C-7 Low Voltage Systems Contractor and/or C-10 Electrical Contractor License is required.			
	Contractor's License No.: Date of Expiration:			
-	Type of License:			
	Description of License:			
10.	Ownership and Collusion—Financial Interest by City Employees: The bidder certifies, by signing this proposal, that he/she has not, directly or indirectly, been collusive with any other vendor or anyone else interested in this proposal. Additionally, the Vendor stipulates that no City officer or employee shall be financially interested, either directly or indirectly, in any contract, sale, purchase or			

lease to which the City is a party, and the Vendor stipulates that no City officer or employee has greater than five percent (5%) ownership in this company, as per Section 706 of the City of Mountain View Charter.

- 11. <u>Independent Contractor</u>: It is agreed that the Vendor is an independent contractor, and all persons working for or under the direction of the Vendor are Vendor's agents, servants and employees, and said persons shall not be deemed agents, servants or employees of the City.
- 12. <u>Assignment</u>: This Agreement, or any part of this Agreement, may not be assigned without the written consent of the other party.
- 13. <u>Termination</u>: The City may terminate this Agreement at any time with ten (10) days' written notice. The City will only pay for goods or services ordered and accepted by the City. Any payments made in advance will be returned to the City on a prorated basis, with the City only paying for those services actually provided.
- 14. <u>Funding Out Clause</u>: The City may terminate this Agreement every June 30, based upon the City Council not funding the purchase of goods or services to be provided in this Agreement after each July 1.
- 15. <u>Nondiscrimination</u>. The Vendor shall afford equal employment opportunities for all persons without discrimination because of race, color, religion, sex, sexual orientation, political affiliation, national origin, ancestry, age, marital status or physical or mental disability.
- 16. Applicable Laws and Attorneys' Fees: This Agreement shall be construed and enforced pursuant to the laws of the State of California. Should any legal action be brought by a party for breach of this Agreement or to enforce any provision herein, the prevailing party of such action shall be entitled to reasonable attorneys' fees, court costs and such other costs as may be fixed by the court. Reasonable attorneys' fees of the City Attorney's Office, if private counsel is not used, shall be based on comparable fees of private attorneys practicing in Santa Clara County.
- 17. <u>Subcontractors</u>: The City prefers a proposal with a single or primary vendor. If you propose a multi-vendor or subcontracted approach, clearly identify the responsibilities of each party and the assurances of performance you offer. The Vendor is the prime contractor and is solely responsible for all of the Vendor's subcontractors.

18. Insurance:

a. <u>Commercial General Liability / Automobile Liability Insurance</u>: The Vendor shall obtain Commercial General Liability insurance and Automobile Liability insurance in the amount of One Million Dollars (\$1,000,000) per occurrence. If a general aggregate limit is used, either the general aggregate limit shall apply separately to this contract or the general aggregate limit shall be twice the required occurrence limit. The Vendor's insurance coverage shall be written on an occurrence basis.

b.	Professional Liability Insurance:				
	☐ Required ☑ Not Required				
	If required, the Vendor shall obtain Professional Liability insurance in the amount of One Million Dollars (\$1,000,000) per occurrence. Professional Liability insurance must be maintained and evidence of insurance shall be provided to the City for at least three (3) years after completion of work.				

- c. <u>Workers' Compensation Insurance</u>: The Vendor shall obtain statutory Workers' Compensation insurance and Employer's Liability insurance in the amount of One Million Dollars (\$1,000,000) per accident.
- d. <u>Acceptability of Insurers</u>: Insurance is to be placed with insurers with a current *Best Rating* of A:VII unless otherwise acceptable to the City.
- e. <u>Verification of Coverage</u>: Insurance, deductibles or self-insurance retentions shall be subject to the City's approval. Original Certificates of Insurance with endorsements shall be received and approved by the City before work commences, and insurance must be in effect for the duration of the contract. The absence of insurance or a reduction of stated limits shall cause all work on the project to cease. Any delays shall not increase costs to the City or increase the duration of the project.

f. Other Insurance Provisions:

- (1) The City of Mountain View, its officers, officials, employees and volunteers are to be covered as additional insured by Endorsement CG 20 10 11 85 for Commercial General and Automobile Liability coverage.
- (2) For any claims related to this project, the Vendor's insurance coverage shall be primary and any insurance or self-insurance maintained by the

City, its officers, officials, employees and volunteers shall not contribute to it.

- (3) Each insurance policy required shall be endorsed that a thirty (30) day notice be given to the City in the event of cancellation or modification to the stipulated insurance coverage.
- (4) In the event the Vendor employs subcontractors as part of the work covered by this Agreement, it shall be the responsibility of the Vendor to ensure that all subcontractors comply with the same insurance requirements that are stated in this Agreement.
- (5) Approval of the insurance by City or acceptance of the Certificate of Insurance by City shall not relieve or decrease the extent to which Vendor may be held responsible for payment of damages resulting from Vendor's services or operation pursuant to this Agreement, nor shall it be deemed a waiver of City's rights to insurance coverage hereunder.
- (6) If, for any reason, Vendor fails to maintain insurance coverage that is required pursuant to this contract, the same shall be deemed a material breach of contract. City, at its sole option, may terminate this contract and obtain damages from Vendor resulting from said breach. Alternately, City may purchase such required insurance coverage, and without further notice to Vendor, City may deduct from sums due to Vendor any premium costs advanced by City for such insurance.

19. Hold Harmless:

a. If Professional Liability Insurance IS required:

Vendor hereby agrees to and shall indemnify, defend and hold City, its officers, agents and employees harmless from any liability for damage or claims for damage for personal injury, including death and/or property damage, caused by negligent acts, errors or omissions in performance of professional services under this Agreement by Vendor or Vendor's contractors, subcontractors, agents or employees' operations under this Agreement. City shall cooperate reasonably in the defense of any action, and Vendor shall employ competent counsel, reasonably acceptable to the City Attorney.

b. If Professional Liability Insurance IS NOT required:

Vendor shall defend, indemnify and hold City, its officers, employees and agents harmless from any liability for damage or claims of same, including but not limited to personal injury, property damage and death, which may arise from Vendor or Vendor's contractors, subcontractors, agents or employees' operations under this Agreement. City shall cooperate reasonably in the defense of any action, and Vendor shall employ competent counsel, reasonably acceptable to the City Attorney.

- 20. <u>Reliance Upon Professional Skill</u>: It is mutually agreed by the parties that the City is relying upon the professional skill of the Vendor, and the Vendor represents to the City that its work shall conform to generally recognized professional standards in the industry. Acceptance of the Vendor's work by the City does not operate as a release of the Vendor's said representation.
- 21. Extending Contract Pricing: The successful Vendor will extend bid pricing as quoted herein to other political subdivisions (i.e., cities, counties, school districts, etc.).

 Yes No

If prices bid herein are offered to other political subdivisions, additional delivery charges, if any, must be negotiated between the political subdivision and the Vendor.

22. Entire Agreement: This Agreement contains the entire understanding between the parties with respect to the subject matter herein. There are no representations, agreements or understandings (whether oral or written) between or among the parties relating to the subject matter of this Agreement which are not fully expressed herein. If the attachments or exhibits to this Agreement, if any, are inconsistent with this Agreement, this Agreement shall control.

23. <u>Signatures</u>: The undersigned understands and agrees that the conditions set forth in the instructions to vendors, the terms and conditions, the specifications, together with the proposal and any other documents submitted in response to the foregoing, shall form a part of and be construed with the purchase order/contract.

VENDOR:			
Company Name	Street Address of Company		
Signature of Officer	City, State, Zip		
Printed Name of Officer	Telephone No./Fax No.		
·•			
Title of Officer	Federal I.D. Tax Number		

CCTV SPECIFICATIONS

Overview

The City of Mountain View is seeking a Contractor to provide, install, and configure a citywide closed circuit television system (CCTV). capable of being viewed live and via recorded video from both on site and remote locations, via the Citywide LAN/WAN network. Phase I of this project will include an upgrade of the present video system at the Main Library and Police / Fire services building. This shall include new cameras, digital recorders (DVR) and viewing software. The Police Emergency Communications Center ("ECC"), as part of this project, shall be equipped with the necessary equipment and software that authorized personnel can view both live and recorded video from the dispatch center work stations and dedicated wall mount monitors, from any DVR that is part of the system.

It is important to understand that equipment specification must meet the minimum requirements set forth herein and be of a non-proprietary design. In addition, no use of any manufacturer security block device (dongle) shall be allowed at the workstation level. The equipment specification must be able to handle audio, additional cameras, monitors, and networking of additional DVR's for future integration.

Though there is no specification required on this phase, it will be required for use with pan/tilt/zoom (PTZ) cameras with remote control, capability for external archiving of digital recordings and transmission over fiber optics.

Special Note to Proposers: In addition to the minimum online storage requirement of 60 days (see section 2.5.A.10), it is the City's intent to comply with Government Code section 34090.6, which specifies that "routine video recordings" may only be discarded/destroyed after a retention period of one year. The proposed solution must CLEARLY STATE the video storage capacity being proposed, AND the estimated retention period that should be expected (including the assumptions used to calculate this period). It is understood and acknowledged that the online (digital) storage of a full year's worth of video, depending upon frame size, frame rate, periods of activity/inactivity, and number of cameras, is considerable. Regardless of the proposed online retention period, all proposals MUST INCLUDE the manner in which the City will meet or exceed the one year retention requirement. The City understands that this may result in the requirement that the video be off-loaded or archived to secondary or backup media on a regular basis. All proposals must clearly describe the archival/backup process(es), as well as the video retrieval and search process required to restore video from secondary/backup media, and the procedures for searching for, retrieving, viewing and saving such restored video footage. Proposals that do not meet the online and overall retention requirements , or that omit the descriptions the process(es) described above may be eliminated from further consideration.

Part 1 General

1.1 Summary

A. Description of work:

- 1. Provide and install a complete CCTV System including, but not limited to;
 - a) Video surveillance cameras.
 - b) Video control equipment.
 - c) Video monitoring and recording equipment.
 - d) Power supplies.
 - e) Network interfacing modules.
 - f) Equipment enclosures.
 - g) Software.

B. Manufacturer of components:

- 1. Contractor shall recommend manufacturer of choice for each of the components with the following criteria;
 - a) Manufacturer has representation in the United States.
 - b) Technical support hot line.
 - c) UL listed components.
 - d) ISO 9000 certified.
 - e) Proven performance for their product.
 - f) Similar applications of product.

C. Contractor qualifications:

- 1. Contractor shall be qualified and possess proper licensing, experience and insurance requirements as follows:
 - a) Possess a current City of Mountain View business license.
 - b) Be an approved Contractor as per city's purchasing department criteria.
 - c) Possess a valid C-7 and/or C-10 contractors license.
 - d) Have a minimum of three (3) years of documented experience with similar installations.
 - e) Provide at least five (5) references with similar installations that City may call upon.
 - f) Be factory certified (where applicable) and trained.
 - g) Provide certificate of insurance for commercial for general liability (CGL), automobile and workman's compensation as per City's standard requirements also naming City as additional insured on CGL and automobile insurance.

- h) Provide list of all owners, partners, officers, employees and subcontractors that will be part of installation and meet City's background check.
- i) List all sub-contractors and their scope with this project.

1.2 References

- A. National Fire Protection Association (NFPA):
 - 1. NFPA 70 National Electrical Code.
- B. California Uniform Building code
- C. California Uniform Fire code.

1.3 Submittals

A. Submittal Procedures:

1. Product data: manufacturer's specification sheets for each component shall be required. Before ordering equipment, submit catalog data sheets, neatly bound with title page and tabbed dividers between sections. List all proposed equipment with reference to corresponding specification paragraph numbers or equipment title. Denote all approved substitutions. Three sets shall be provided.

B. Shop Drawings:

- 1. The following shall be included in the shop drawing package. City shall provide backgrounds for floor plan. City shall require three sets.
 - a) Block diagram: System block diagrams noting major system components and interrelationships of each component.
 - b) Consoles, monitors and equipment racks: bracket and rack elevation drawings showing equipment arrangement.
 - c) Drawings shall be in AutoCAD (.DWG) format. All fonts and other drawing parts necessary to the drawings shall be included.
 - d) Other documents and lists shall be in Microsoft Office 2003 format
- C. Sequence and scheduling Plan: Contractor shall provide installation scheduling plan for review and approval. Contractor shall attend all job meetings with city representative. Give report of progress of installation on a weekly basis.

D. Closeout submittals:

1. Operation and maintenance data: Include data for each type of product, including features and operating sequences, both automatic and manual.

- 2. Product quick reference cards for the operation of all key system components.
- 3. Project record Documents; Contractor shall provide field-accurate drawings that reflect actual locations of cameras and routing of signal cable, indicating cable identifiers, layout, location and numbering of system devices to reflect as-built conditions.
- 4. Provide a final materials list of equipment installed and spare parts on hand. Material list shall include model number, serial number and date installed.
- 5. Project completion certification: Document signed by Contractor and City Representative indicating that the project is fully complete with all punchlisted items resolved.

1.4 Software

- A. A properly licensed working copy of all software required to operate or configure the systems specified herein shall be supplied, including all software, firmware and hardware required for configuration, adjustment, diagnosis and repair. This shall include but not limited to, touch panel files, IR code files, DSP configuration files, web-based touch panel pages, or any other files or applications necessary to completely reinstall and configure all system components back to their operable state.
- B. Software shall be provided in its 'installable' state on industry standard CD-ROM format from the manufacturer. Where possible, a single master CD-ROM should be provided.
- C. Where any elements of the software are based on user modifiable source code, both the source code and compiler shall be provided and licensed to the City of Mountain View.

1.5 Delivery, storage and handling

- A. Keep devices and equipment in manufacture's packaging in a secured location until system is ready for installation.
- B. Comply with manufacturer's requirements. Coordinate storage location with City representative.
- C. The equipment delivered must be insured at the contractor's expense through acceptance.

1.6 Warranty, service, technical support plan

A. Warranty:

1. Provide manufacturer warranty for a minimum of one (1) year after facility acceptance and project completion certification for materials and labor.

- 2. Service plan shall include all parts and labor, and shall include return shipping. Failed equipment shall be repaired or replaced at no charge to the City during warranty period.
- 3. Contractor shall transfer all manufacturer warranties to the City at the completion of the Work. City shall not be required to process any paperwork in order to be entitled to service plan coverage. It is the Contractor's sole responsibility to monitor and comply with warranty eligibility.
- 4. Where operational performance is substantially affected, all software and firmware shall be upgraded to the latest version supported by the purchased hardware platform throughout the service plan period and be provided at no cost to the City. Such upgrades shall be covered under the warranty/service plan and are at the discretion of the City.
 - (i) Any software bugs identified by the City and mutually agreed upon as "level one" bugs (impacting operation with no work around) shall be rectified within two (2) weeks of their being reported.
 - (ii) Any software bugs identified by the City and mutually agreed upon as "level two" bugs (impacting operation but with a work- around) shall be rectified within 90 days of their being reported.
- 5. Turnaround time for all repairs (warranty and out of warranty) shall not exceed 72 hours. The City requires a Next Business Day (NBD) on site response time
 - .(i) Contractor shall make advance replacement units available in cases where City operational issues require immediate replacement of a unit while minimizing down time.

B. Technical Support:

- 1. Contractor shall provide a toll free 24/7 technical support at no charge throughout the warranty period.
- 2. Contractor shall provide on-site installation support for system pre-construction site survey and project review, punch-list generation and final inspection and system certification.
- 3. Data recovery Contractor shall provide a service to assist the City in recovering data from digital recording system hard drives and removal storage media in the event of a failure.
- a. Turnaround time for data recovery shall be less then seven (7) days from receipt of hard drives at installers data recovery center.

Part 2 Products

2.1 Manufacturers

- A. Approved manufacturers, including, but not limited to:
 - 1. GE Security
 - 2. Pelco
 - 3. Honeywell
 - 4. Sanyo
 - 5. Toshiba
 - 6. Sony
 - 7. Bosch
 - 8. Panasonic

B. Product requirements:

- 1. Product options and substitutions are not permitted without a written and City approved deviation.
- 2. All equipment to be supplied under this specification shall be new and the current model of the manufacturer listed above.
- 3. Systems and components shall have been thoroughly tested and proven in actual use.

2.2 Video cameras

1. Color dome camera for exterior fixed applications

- A. The dome assembly shall be manufactured for outdoor applications. The camera shall produce color images using an EXview image sensor and be contained in a heavy-duty, weatherproof dome housing.
- B. The camera shall meet or exceed the following specifications:
 - 1. The camera shall have the form factor as typical of a CCTV dome video camera.
 - 2. The image capturing device shall be a 1/3-inch interline transfer EXview HAD CCD image sensor.
 - 3. The camera shall have digital signal processing.
 - 4. The camera shall have automatic backlight compensation.
 - 5. The camera shall have a variable high-speed electronic shutter.
 - a. The electronic shutter shall have automatic adjustment.

- b. The electronic shutter shall operate from 1/60 NTSC or 1/50 PAL to 1/100,000 sec.
- 6. The signal system shall be NTSC, with PAL optional.
- 7. The resolution that the camera provides shall be 480 television lines.
- 8. The camera shall have 811 horizontal and 508 vertical picture elements NTSC or 795 horizontal and 596 vertical picture elements PAL.
- 9. The scanning system shall be 525/60 lines NTSC or 625/50 lines PAL.
- 10. The synchronizing system shall be internal / line-lock.
 - a. The synchronizing system shall be phase adjustable.
- 11. The sensitivity shall be 1.0 lux at f1.2 (SAGC on, 30 IRE).
- 12. The sensitivity shall be 0 lux under infrared illumination.
- 13. The signal-to-noise ratio shall be greater than 50 dB.
- 14. The camera shall have advanced digital autotracking color balance.
- 15. The camera shall have automatic gain.
- 16. The camera shall have a composite video output.
 - a. The video output shall be 1.0 V p-p at 75-ohm load.
- 17. Several lens options shall be available for the camera:
 - a. Lens pack that includes 2.5 mm, 4 mm, and 6 mm lenses
 - b. 8 mm lens

- c. 12 mm lens
- d. 16 mm lens
- e. 25 mm lens
- f. 3 to 8 mm varifocal autoiris lens (autoiris will be required)
- g. 9 to 22 mm varifocal autoiris lens (autoiris will be required)
- C. The housing shall meet or exceed the following specifications:
 - 1. The dome and base shall be circular in construction.
 - 2. The housing shall be impact resistant Lexan.
 - 3. The housing shall have a hinged lid to allow access to the camera inside
 - 4. The housing shall be weatherproof for indoor or outdoor use.
 - 5. The housing shall have a built-in rubber gasket on its base for weather sealing.
 - 6. The housing shall have tamperproof screws to resist vandals.
 - 7. The housing shall have a conduit entry on its side and base.
 - 8. The housing shall be constructed to comply with IP66 rating.
 - 9. The dome shall be available with a wall mount bracket, pendant mount bracket, and extendable pendant mount.
 - 10. The dome shall be available with either coaxial or UTP transmission types.
 - a. The UTP shall be swappable in the field using a modular board.
- D. The electrical specifications for the dome shall be as follows:
 - 1. Power source shall be universal, 10 to 40 VDC or 18 to 30 VAC.
 - 2. Power consumption shall be 3.5 W.
- E. The environmental specifications for the dome shall be as follows:
 - 1. Operating temperature shall be 14 to 122 degrees Fahrenheit or -10 to 50 degrees Celsius.
- F. The physical specifications for the dome shall be as follows:
 - 1. Net weight shall be in the range of 1.8 pounds or 820 grams.

- a. Dimensions shall be in the range of 5.00 in. W by 4.00 in. H or 135 mm by 101 mm.
- G. The dome shall conform to these internationally recognized compliance standards:
 - 1. FCC
 - 2. UL

2. Color discreet dome camera for indoor applications

- A. The dome assembly shall be manufactured for indoor applications. The camera shall produce high-resolution color images and be contained in dome housing.
- B. The camera shall meet or exceed the following specifications:

 The camera shall have the form factor as typical of a CCTV dome video camera.
- The image capturing device shall be a 1/3-inch interline transfer super HAD CCD image sensor.
- 2. The camera shall have automatic backlight compensation.
- 3. The camera shall have a variable high-speed electronic shutter.
 - a. The electronic shutter shall have automatic adjustment.
 - b. The electronic shutter shall operate from 1/60 NTSC or 1/50 PAL to 1/100,000 sec.
- 3. The signal system shall be NTSC, with PAL optional.
- 4. The resolution that the camera provides shall be 480 television lines.
- 5. The camera shall have 811 horizontal and 508 vertical picture elements NTSC or 795 horizontal and 596 vertical picture elements PAL.
- 6. The scanning system shall be 525/60 lines NTSC or 625/50 lines PAL.
- 7. The synchronizing system shall be internal / line-lock AC.
- 8. The sensitivity shall be 1.0 lux at f1.2.
- 9. The sensitivity shall be 0.1 lux at the faceplate.

- 10. The signal-to-noise ratio shall be greater than 50 dB.
- 11. The camera shall have automatic tracking white balance from 2500 to 9500 K.
- 12. The camera shall have automatic gain control, max 30 dB.
- 13. The camera shall have a composite video output.
 - a. The video output shall be 1.0 V p-p at 75-ohm load.
- 14. Two lens options shall be available for the camera:
 - a. 4 to 9 mm varifocal lens
 - b. 4 to 9 mm varifocal autoiris lens (autoiris will be required)
- C. The electrical specifications for the dome shall be as follows:
- 1. Power source shall be universal, 10 to 40 VDC or 18 to 30 VAC.
- 2. Power consumption shall be 1.9 W at 12 VDC or 3.8 W at 24 VAC.
- D. The environmental specifications for the dome shall be as follows:
- Operating temperature shall be 14 to 122 degrees Fahrenheit or -10 to 50 degrees Celsius.
- D. The physical specifications for the dome shall be as follows:
- 1. Dimensions shall be in the range of 5.0 inches W by 3.5 inches H by 5.5 inches D or 127 mm by 89 mm by 140 mm.
- 2. The dome shall conform to these internationally recognized compliance standards:
- 3. FCC
- 4. UL
- 2.3 Camera Power supplies

24 VAC multiple outlet indoor power supply with 16 fused 24 VAC outputs, 200 VA

- A. The power supply shall meet or exceed the following specifications:
 - 1. The design shall consist of a steel wall-mount housing.
 - a. The housing shall have a locking door.
 - 2. The power supply shall provide up to 16 24 VAC outputs.
 - 3. The power supply shall provide resettable fuses (circuit breaker) for each output.
 - 4. PTC protected outputs shall meet Class 2, power limited, requirements.
- B. The electrical specifications for the power supply shall be as follows:
 - 1. Input voltage: 120 VAC
 - 2. Input power: 200 VA
 - 3. Output voltage: 24 VAC
 - 4. Output power: 12.5 VA
- C. The environmental specifications for the power supply shall be as follows:
 - 1. Operating temperature shall be 14 to 122 degrees Fahrenheit or -10 to 50 degrees Celsius.
 - 2. Relative humidity shall be up to 90 percent, noncondensing.
- D. The physical specifications for the power supply shall be as follows:
 - 1. Dimensions shall be in the range of $12 \times 12 \times 4$ inches or $305 \times 305 \times 102$ mm.
 - 2. Nominal weight shall be in the range of 13.5 pounds or 6 kg.
- E. The power supply shall conform to these internationally recognized compliance standards:

UL

- F. Provide a means for disconnecting camera power supplies from main power at the power supply enclosure, either through detachable power cord, master fuse or circuit breaker, or other UL approved switching device.
- 2.4 Video camera housing and mounts

- A. On interior or exterior mounted cameras, proper mount that is listed for use with dome assembly shall be utilized, including;
 - 1. On mounting to ceiling, direct dome housing shall be secured to ceiling material. If mounting height hinders coverage or obstacles are present that hinder either mounting the dome or obscure viewing capability, then an extension shall be used. This extension shall be listed to use with the product and means for securing / concealing cable included. And a minimum of standard threaded schedule 40 rigid pipe with a minimum of 1" diameter be used.
 - 2. On mounting to a wall,
 - a. Interior bracket shall be included to have dome at its horizontal view angle. This bracket shall be listed for use with dome assembly.
 - b. Exterior pendant mount shall be used. This pendant mount shall be listed to use with product and means for securing / concealing cable included.

NOTE: City reserves the right to confirm exact mounting method for each camera and may to elect to have a certain style bracket used, pending mounting and cosmetics conditions.

- B. Finishes of used brackets and assemblies shall be coordinated with finishes of dome assembly, making for a smooth transition of dome assembly and bracket components. Contractor shall provide paint and touch up services to match cosmetics of surrounding areas as best as possible.
- C. All housings shall be sufficiently dust and moisture resistant to withstand normal environmental conditions in their chosen installation location.
- D. Hardware shall be provided to ensure tamper-resistant mounting in a variety of locations without modification to the integrity of the housing.

2.5 DIGITAL VIDEO RECORDERS

A. Digital Video Recorder.

The Digital Video Multiplexed Recorder with Ethernet connectivity (DVMR) shall be as manufactured with the following specifications and features as outlined. The DVMR shall require little end user training and shall operate like a conventional multiplexer and VCR with local display monitors for live and playback viewing while the system continues to record new images. It shall be an integrated security system, capable of time division multiplexing multiple cameras and storing their digitized and compressed images on a variety of mass storage options, including internal (integral) hard disk drives, as well as network attached storage (NAS) and storage attached network (SAN) storage systems. The system shall provide fast search and retrieval and review by authorized users locally at the unit, and by authorized City network users via remote

connectivity from a dedicated Graphical User Interface (GUI) application AND via any standard W3C compliant web browser. Systems that REQUIRE the use of a specific web browser will not be accepted.

Additionally, the system shall provide automated alarm handling. Upon receipt of an alarm, the system shall be able to automatically change display and record speed changes, provide relay output operation and provide serial data transfer to a host. The system shall be able to sense alarm change of state (COS) conditions from integral motion detection, hard wired alarm inputs or serial data transfer from a host. It shall similarly be able to sense an event COS by receipt of text data from a foreign host, though a serial port on the unit. During investigations, it shall be possible to search and retrieve stored video data by date, time, camera, alarm and transaction text, or by selecting a hot spot within a camera's field of view and searching for a change of state.

The following is the maximum bandwidth use over the City's LAN/WAN for doing remote viewing of live video - single & multiple cameras, recorded video and data transfer of DVR to on/off site locations. This includes the following criteria:

- At 15-20 pictures per second (PPS) at the highest NTSC resolution, the maximum bandwidth allowed will be 4.2Mb per second. This would only be transmitted upon a requested "pulled event" from the DVR by the remote viewing software package.
- Viewing software shall have password protected internal settings that will allow throttling of data by user (minimum of two levels). This includes a manager level that allows full 20 PPS / 4.2Mb with highest resolution to a typical user level that only allows 7 PPS / 2Mb per second.
- Viewing software shall include an internal measuring & diagnostic tool to allow end user to check bandwidth usage.

The DVMR shall include, but not be limited to the following:

- 1. Recording must be continuous in nature, with a series of "key frames" which periodically refresh the entire video image. The frequency of these key frames must be sufficient to allow the full range of motion to be visible.
- 2. Authentication for evidentiary purposes through Digital Signatures.

 a. The use of authentication that alters or degrades the video image for the purpose of verification is not acceptable. Any video authentication must be done in the background, by use of the MD5 checksum, or other methods that allow verification without image degradation.

- b. The file format used to distribute video images must contain the authentication data as an intrinsic part of the file. All copies of this file must contain the identical authentication data which may not be altered in any manner.
 - (i) The video recorder shall have the ability to export to an unauthenticated, commonly available file formats such as MOV, MPG or AVI. While this copy may be altered or redistributed without authentication, it shall not be the default file format. The exported video shall NOT require a special windows "codec" in order to be played via Windows Media Player version 9.0 or later.
- 3. Video images shall be recorded with sufficient resolution, color depth, and quality of image compression as to make the recorded image indistinguishable from a DVD sourced original.
- 4. The DVMR shall support event driven recording. Events may be internally generated (motion analysis, video loss or presence), or externally triggered (contact closure).
- 5. Image Exporting The system shall have the ability to export video images as follows:
 - a. Video Printing The system shall allow for easy printing of still images.
 - (i) Images may be printed to standard, windows based printer that does not require proprietary drivers.
 - (ii) Printer may be directly connected to the DVR.
 - (iii) Printer may be connected to a workstation viewing the image via a USB or Parallel port.
 - (iv) Any City network printer available to the DVMR and/or client workstation.
 - b. Still Images Still images may be saved using the JPEG file format, for printing at a later time or electronic distribution.
 - c. CD-R or DVD recordable formats Image shall be archived to DVD or CD in each of the following formats.
 - (i) *Proprietary* Image may be saved in a format that provides authentication to ensure that the image has not been altered in any way. Such authentication must not alter the quality of the video image. Software to allow viewing of this proprietary format that may be freely copied and distributed at no further cost to the City must be provided.
 - (ii) Standard Image may be saved in an open source format, which may be distributed and played using a commonly available media player, such as $Apple^{TM}$ QuickTimeTM or MicrosoftTM Media Player.
 - (iii) Analog Out An analog output shall be provided that may be connected to a video monitor, VCR, or other analog recording or display device.
- 6. Re-importing images A mechanism shall be provided to allow the user to play back video images that have been previously exported without the use of an external device.
- 7. The DVR shall auto restart on power failure.
 - a. The unit will automatically begin recording upon restoration of power.
 - b. The system must maintain all camera name and scheduling information and must return in the state it was programmed to be in at the time of the power failure.
 - c. The system must retain correct time and date information.
- 8. Input Connections
 - a. The system must support a minimum of 16 cameras.
 - b. All video inputs shall use a BNC connection.
 - c. Capability shall be provided to loop each video input signal to an additional device, through the use of an adaptor cable.
- 9. Output Connections

- a. Composite video outputs shall be NTSC utilizing both BNC and S-Video (mini DIN) connectors.
- b. The system must utilize a super VGA computer monitor for main screen user navigation and video viewing.
- 10. Record Duration The DVMR shall include online storage of at least sixty (60) days with less than 30 seconds required to retrieve a video clip. Additional off-line storage is to be provided to accommodate the legal requirement of ONE YEAR retention. (copies of applicable law included with this document) Off-line storage shall include library/indexing capabilities to allow an operator to quickly and easily identify specifically where any video segment is stored and retrieve it simply so it can be viewed. Minimal search criteria should be date/time and location of video needed. It is desirable to have the process for archiving video to off-line storage automated or extremely simplified requiring minimal to no user intervention. Appropriate logging and notifications should occur whenever archiving is completed.
 - a. In order to calculate storage capacity, the following assumption may be used: All cameras are in high activity areas. These cameras will experience a large number of frequent image changes such as busy areas with many people walking or movement of heavy equipment.
- 11. Recorded Frame Size and Rate The City desires the best possible combination of frame size and recording rate possible, given the storage and retention requirements stated elsewhere within this document. The City desires recorded video frame size of at least 4CIF or D1 or comparable, at up to 30 frames per second, on all channels in each DVMR. In all cases the frame size shall be industry standard for viewing and playback on standard video and computer displays. All proposals must clearly and separately disclose the frame size and rate for viewing, recording, and playback.
- 12. Duplex Operation The system shall be capable of simultaneously performing a minimum of any two of the following functions:
 - a. recording video
 - b. displaying live video
 - c. playing back recorded video
 - d. exporting stored video
- 13. Video Monitoring
 - a. Images being played back may be synchronized or stopped (frozen) individually.
 - b. Provide multiple views on the same screen during playback or live video view.
 - c. Display software shall provide for multi-camera viewing using a variety of multi-screen display modes.
 - (i) These multiple images may be exported in such a manner as to allow later synchronized playback of the same series of images.
 - d. Provide the ability to digitally enhance video images, to increase or decrease contrast and brightness, correct image color characteristics, and digitally zoom in on the image.
 - e. Provide a full suite of search tools to allow the search and retrieval of images based on time, date, motion (within pre-defined screen areas), alarm, video loss, and video presence.
 - f. Provide the ability to sequence a number of individual video segments such that a composite video clip can be made of a series of individual clips or incidents.
 - g. Frame rate shall be adjustable on an individual camera basis in a range that extends from 3 images per second (ips) to real-time which shall be indistinguishable from NTSC 30 ips video.

B. Remote digital video control software

- 1. Software shall provide the user with the ability to view video via Ethernet or modem.
- 2. Software shall allow the user to view video from digital video recorders, digital video multiplexer recorders (DVMR units), digital single channel recorders, and digital video storage devices.
- 3. Software shall allow the user to view video archived on a CD-R or DVD.
 - (a) Software shall allow the user to view video recorded directly on to the hard drive of a personal computer.
- 4. Software shall include, but not be limited to, the following features:
 - (a) Software shall have a main window for viewing live or recorded video.
 - (i) Video shall be viewable in several screen display modes, from full size to 64-way views.
 - (ii) The main window shall have the following areas:
 - 1) Menu bar: top of window
 - a) The menu bar shall change its appearance to reflect the program mode.
 - i) Initial menu
 - ii) Menu after log in
 - iii) Menu after live connection
 - iv) Menu in playback mode
 - 2) Icon bar: underneath menu bar
 - a) The icon bar shall provide access to the following functions and parameters:
 - i) Log in/log off
 - ii) Connect/disconnect
 - iii) Open file
 - iv) Save image
 - v) Print image
 - vi) View live

- vii) View playback
- viii) Audio on/mute
 - ix) Start/stop recording
 - x) Search
 - xi) Snapshot
- 3) Main viewing area: large blue area
 - a) The main viewing area shall display images in multiple camera and single camera formats.
 - b) The following displays shall be options:
 - i) 16-way multiscreen display (large and medium)
 - ii) 4-way display
 - iii) Single camera display large
 - iv) Single camera display medium
 - v) Single camera display small
- 4) Status bar: within existing view of windows background.
 - a) The status bar shall display messages and current connection status information.
- 5) Button panel: within existing view of windows background.
- 6) The button panel shall display the following clickable buttons:
 - i) Play backward
 - ii) Stop
 - iii) Play forward
 - iv) Single frame rewind
 - v) Pause
 - vi) Single frame advance
- vii) Rewind
- viii) Fast forward
 - ix) Connect/disconnect
 - x) Numbers (call up individual cameras)
 - xi) Single camera display size: small, medium, or large
- xii) Multiscreen: large 4-way, medium 4-way, or large 16-way
- xiii) Iris open and close

- xiv) Focus in and out
- xv) Zoom in and out
- xvi) Auto zoom in
- xvii) Return Previous
- xviii) Zoom all
 - xix) Set preset
 - xx) Go to
 - xxi) Preset
 - b) The button menu shall display active buttons.
 - i) When the play forward, play reverse, fast forward, or rewind buttons are clicked, the icon color changes from black to green.
 - ii) When the pause button is clicked, the icon color changes from black to red.
 - 7) Text data display box: under main viewing area.
 - a) The text data display box shall show any encoded text associated with the current video image.
 - 8) Image control pop-up menu: right-click on a single display
 - a) The image control pop-up menu shall include the following video enhancements:
 - i) Image selection by camera number
 - ii) Zoom in/out
 - iii) Contrast
 - iv) Intensity
 - v) Enhance
 - vi) Sharpen
 - vii) Blur
 - viii) Restore (current camera)
 - ix) Restore all
 - x) Image quality from 1 (low) to 5 (high) and black-and-white
- 9) Software shall allow the user to continue recording while viewing video via a PC.
- 10) Software shall have a single interactive search window that allows the user to initiate basic and advanced searches.

- (i) Advanced search functionality shall include the ability to search over multiple site locations using the following filters:
- a) Alarm/event
- b) Text
- c) Camera
- d) Time
- e) Date
- (ii) When used with a DVMR Triplex unit, Software shall allow motion search by camera.
 - a) The user shall be able to use the motion search feature to identify changes in the camera's field of view.
 - b) Motion search shall be activated by user definition of time/date, camera, and area of interest.
 - 1. Software shall incorporate an Image link feature that allows users to select any line in the text display and call up corresponding video.
- 11) Software shall include software tools for managing multiple users with privileges to access sites.
- (i) A user shall be any person who uses the software to review data stored on a digital recording device.
- a) Authorized users shall be able to:
- 1. Configure digital video units.
- 2. Manage and display an address book for multi location users
- 3. Automatically verify proper digital system operation
- (ii) A group shall be any collection of users that have specific access rights to a specific list of sites.
 - a) Group privileges shall be able to be defined to include:
 - 1. Accessible sites
 - 2. Viewable cameras
 - 3. Ability to view live video, recorded video, or both
 - Control of PTZ cameras
 - 5. Ability to control image quality
 - 6. Remote configuration of units within a group
- 12) Software shall allow the user to have remote access to DVMRe menu systems.

- (i) Users shall be able to remotely view and change menu functions, including but not limited to:
- a) Camera titles
- b) Recording rates
- c) Recording schedules
- d) Alarm input and relay output behavior
- e) Camera motion areas and sensitivity
- f) Recorded image quality
- (ii) Available menu options shall differ depending on the connected digital recorder or storage device.
- 13) Software shall have a disk analysis window that provides a graphical overview of recorded data on a per camera basis.
 - (i) The disk analysis window shall use a color legend to identify status.
 - a) Green (as example): standard video
 - b) Black (as example): camera disabled or absent
 - c) Red (as example): alarm mode
 - d) Blue (as example): video loss
 - e) White (as example): end of disk
 - f) Yellow (as example): events
- (ii) The disk analysis window shall use a method to distinguish easy viewing. Such as the following method:
 - a) Light blue: play indicator, positioned by progress slider bar
 - b) Pink: record marker indicates the current recording position on a multiplevolume unit
 - c) Red: left and right markers to assist with defining boundaries for data retrieval
- 14) Software shall allow the user to save, print, and export images.
 - (i) The user shall be able to save images in the following file formats:
 - a) Bitmap
 - b) JPG
 - (ii) Software shall allow the user to capture evidence to a CD or DVD using a software component.

- a) Images recorded with the Software record button are watermarked to ensure integrity.
- b) With a CD or DVD, the user shall be able to:
 - 1. Select which video file on the CD to play
 - 2. Play images in the standard playback display formats in various sizes
 - i) Single camera
 - ii) Multiple camera
 - 3. Play images using the standard controls
 - i) Playback speed control will not be functional
 - 4. Print the current image
 - i)The user shall be able to print associated text with each image.
- 15) Software shall include a software component that allows the user to enhance images while viewing in real time.
 - (i) Software shall allow the user to print images and associated transaction text.
- (ii) Software shall allow the following user adjustments:
 - a) Contrast
 - b) Intensity
 - c) Hue
 - d) Saturation
 - e) Sharpness
 - f) Noise level
- (iii) Software shall allow the user to digitally zoom anywhere on an image for magnified views of the selected area.
- 16) Software shall include a Multisite Mode that allows users to view camera images from multiple DVMR Triplex units simultaneously on custom-defined screens.
 - (i) Multisite Mode shall support simultaneous connections up to 16 Triplex units with 256 total cameras.
 - a) The user shall be able to view up to 64 cameras can be viewed at one time.
- (ii) Custom screens shall be able to consist of any combination of 4, 16, 36, and 64 way screens.
 - a) The user shall be able to create up to 25 custom screens.
 - b) The user shall be able to give a unique name to every custom screen.

- 17) Software shall support live and recorded audio when connected to a DVMR unit with audio functionality.
- 18) Software shall include alarm monitoring that can be started or stopped by the user.
 - (i) A screen with two tables shall be viewable when Alarm Monitor is started by the user.
 - a) The top table shall display a list of alarm data related to corresponding video images. Being viewed from a standard windows screen.
 - 1. Date/time
 - 2. Site description
 - 3. Site serial number
 - 4. Camera
 - 5. Type
 - 6. Pre: prealarm images uploaded
 - 7. Main: main alarm images uploaded
 - 8. Post: post alarm images uploaded
 - 9. Format
 - The bottom table shall display reported items that do not have associated images.
 - 1. Video loss
 - 2. Recording start/stop
 - 3. Archive device state changes
 - Menu access
 - 5. Power up
 - 6. Unit connections
- 19) Software shall allow the user to select English via the Windows® Control Panel.
 - 1. English is the default language.
- (n) Software shall require the following minimum system requirements prior to installation on a PC:
 - 1. CPU: Pentium III 1.2 GHz or faster
 - 2. RAM: 256MB

- 3. Hard disk drive: 50MB free hard drive space
- 4. Monitor and graphics: SVGA, 1024x768, 24-bit color
- 5. Operating system: Windows® 2000/XP Pro
- (o) Software shall be compatible with the selected and specified DVR.

14. Color LCD monitors

- A. The monitor shall meet or exceed the following specifications:
 - 1. The monitor shall incorporate an active matrix TFT LCD panel.
 - a. The contrast ratio shall be 500:1 or better
 - b. The typical brightness shall be 250 cd/m² or better
 - c. The monitor shall display at least 16.7 million colors.
 - d. The light source for the LCD panel shall have a lifetime of 50,000 hours.
 - e. The scan frequency horizontal shall be 30 K to 80 KHz and the scan frequency vertical shall be 56 to 75 Hz.
 - f. The viewing angle for the monitor shall be 170 degrees horizontal and 170 degrees vertical.
 - 2. The monitor shall have automatic NTSC or PAL recognition.
 - 3. The monitor shall have a picture-in-picture function.
 - 4. The monitor shall use the following signal connectors:
 - a. Video 1.0 V peak-to-peak at 75 ohms
 - b. BNC in/out
 - c. Y/C (S-video) in/out
 - d. Audio in/out
 - e. VGA 15-pin D-Sub
 - 5. The monitor shall have at least one audio speaker.
 - 6. The speaker's audio output shall be 1.0 W maximum.
 - 7. The monitor shall have the following front control panel buttons:
 - a. Power on/off
 - b. LED indicator

- c. Mode
- d. Increase (volume)
- e. Decrease (volume)
- f. Up (contrast adjustment)
- g. Down (brightness adjustment)
- h. Menu
- i. Auto
- The monitor shall have the following options for adjustment in an onscreen display menu:
 - a. Color
 - b. Tint
 - c. Brightness
 - d. Contrast
 - e. Sharpness
 - f. Volume
 - g. Language
 - h. Scan
 - i. Color Temp
 - j. H-Position
 - k. PIP (Picture-in-picture)
 - 1. Recall
- B. The electrical specifications for the monitor shall be as follows:
 - 1. Input voltage shall be 12 VDC/3 A.
 - 2. Power consumption shall be 50 W maximum.
- C. The environmental specifications for the monitor shall be as follows:
 - 1. Operating temperature shall be 32 to 104 degrees Fahrenheit or 0 to 40 degrees Celsius.
 - 2. Operating humidity shall be 10 to 85 percent.
- D. The monitor shall conform to these internationally recognized compliance standards:
 - 1. FCC
 - 2. UL

2.6 UNSHIELDED TWISTED PAIR (UTP) MODULES

A. Unshielded twisted pair (UTP) modules will be used for cable runs where a signal must be transmitted further than 50 feet unless Fiber Optic transmission is a requirement.

1. Passive Transceivers:

- a. Signal Transmission: Units shall be used at the signal transmission end for all distances under 1,200 linear feet or less, unless the specific conditions exist. Signal transmission end is defined as the end of the cable run where a signal is generated (camera or video output).
- b. Signal Reception: Units shall be used at the signal reception end for all distances less than or equal to 500 feet. Signal reception end is defined as the end of the cable where a signal is received (monitor or video input).
- c. Specifications:
 - (i) Passive UTP Transceivers shall be capable of transmitting and receiving baseband type monochrome or color video signals over unshielded twisted pair Category 5e or better (UTP) cable, up to a maximum cable distance of 500 feet with a transceiver device connected at each end of the cable.
 - (ii) The transceiver device shall be capable of driving a color video signal of NTSC standard 525 lines with an operating frequency range of DC to 10 MHz and common mode rejection to be greater than 60 dB.
 - (iii) The transceiver devices shall not require power to operate as specified.
 - (iv) The transceiver used as a transmitting device shall be designed to accept a baseband video signal from a 75 ohm impedance source and the transceiver used as a receiving device shall deliver a baseband video signal capable of driving a 75 ohm impedance load.
 - (v) The transceiver device shall support bi-directional signal transmission, i.e.; video from the video source to the receiving equipment and control from the receiving end to the video source equipment over a single unshielded twisted pair (UTP) using equipment that provides such bi-directional operation during the vertical interval.
 - (vi) Video connection to the transceiver device shall be by means of a BNC type female connector and connection to UTP cable shall be by means of two Phillips type head screw terminals. The screw terminals shall be plated with a rust preventive material to prevent corrosion.
 - (vii) The transceiver device shall be capable of driving an active (powered) companion UTP receiver, operating at a distance of up to 1,200 feet over cables specified for that unit.
 - (viii) The combination of the transceiver device and the active receiver shall provide a minimum of 500 lines of video resolution.
 - (ix) The transceiver devices shall operate within specifications without causing interference or interfering with any other base band video, communication, data and/or other low voltage signals operating in multi-twisted pair UTP cables.

2. Active Receivers:

a. Signal Reception: Units shall be used at the signal reception end for all distances greater than 500 feet, or where environmental conditions dictate the use of signal equalization. Signal reception end is defined as the end of the cable where a signal is received (monitor or video input).

b. Specifications:

- (i) Active UTP receivers shall be capable of receiving baseband type monochrome or color video signals over Category 5e or better (UTP) cable, up to a maximum cable length of 1,200 feet, when connected to a passive video transceiver.
 - 1. With a symmetrical and balanced composite input from the transmitter unit and using cables as specified at a cable length of 1,200 feet, the output shall be a 1 Vpp composite video signal into 75 ohms.
- (ii) The active receiver shall be capable of equalizing and delivering a baseband color video signal of NTSC standard 525 lines at the maximum specified distance with an operating frequency range of DC to 10 MHz and common mode rejection to be greater than 60 dB.
- (iii) The active receiver shall be provided with a companion power supply, which shall have provisions to plug directly into an AC wall outlet and connect to the receiver power terminals.
- (iv) The active receiver shall provide frequency equalization by means of eight dual inline (DIP) switches which shall provide compensation for varying cable lengths. The effect of the frequency compensation shall be to both equalize and to amplify the video signal thereby providing loss compensation for video as cable length is increased.
- (v) The active receiver shall have built-in transient protection, with a screw connection for earth ground.
- (vi) Video connection to the active receiver shall be by means of a BNC type female connector. A five screw terminal block shall provide connection to the UTP cable (2), 12 VDC power supply (2) and earth ground (1).
- (vii) The active receiver shall operate within specifications without causing interference or interfering with any other base band video, communication, data and/or other low voltage signals operating in multi-twisted pair UTP cables.
- c. If six (6) or more active receivers are used in close proximity to each other, rack-mounted receivers with identical performance characteristics shall be substituted in their place.

2.8 CABLING

A. Video:

- 1. Where UTP video modules are used, all video shall be run utilizing the brown/brown-white pair of a CAT-5e (or greater) unshielded twisted pair (UTP) cable. The remaining conductors shall be left open as spares.
- 2. Each cable shall be individually home run from the device to the control room.

B. Power:

1. Power cable shall be appropriately sized to ensure that any signal loss as a function of cable length does not prohibit the delivery of sufficient voltage and current from the power supply to the powered device.

C. Control Data

- a. For cable runs of 500 feet or less, control data for remotely position-able cameras shall be combined with the video signal and shall not require the use of an additional cable or conductors. Such data signals must be fully compatible with the UTP modules specified.
- b. For cable runs greater than 500 feet but less than 1200 feet, control data shall utilize the orange/orange-white pair of the CAT-5e (or greater) unshielded twisted pair (UTP) cable that is used for the video signal. The remaining conductors shall be left open as spares.

Cable type:	Signal	. Use
RG-59/U (Belden #8241B or approved equal)	Video	Video cable runs up to 50 feet
Micro-Coax (Belden #9221 or approved equal)	Video	Internal console and rack connections
Fiber Optic (multi-mode)	Video / data	See Section 2.9
CAT5e (Belden #1583A or approved equal)	UTP Video	UTP video signals (see section 2.8)

2.9 ACCESSORIES

- A. Lightning/Surge Protection: Products shall utilize internal or external surge protection such that a normally occurring power surge shall not void any manufacturer's warranty.
- B. All DVMR's shall utilize a standalone UPS sized for a minimum of 15 minutes of battery runtime. The UPS shall be provided by the installer.
- C. Connectivity to the City LAN/WAN network will be provided by the City. Installer shall coordinate with City's IT department and provide connection and programming to City's specifications.
- D. Upright Racks: The racks to be utilized for this project will be furnished by the City.
- E. Reference Map: The installer is to provide an electronically generated as-built floor plan of the facility, Provide on the plan the locations of all cameras and camera numbers.
- F. Service Plan. First year shall fall under specified warranty, year two shall be an option and priced as an option. At a minimum, this service plan shall include one annual PM visit annually and next business day on-site response times.

Part 3 Execution:

3.1 EXAMINATION

- A. Execution Requirements: Verification of existing conditions before starting Work.
- B. Verification of Conditions: Verify that field measurements, surfaces, substrates, and conditions are as required, and ready to receive Work.
 - 1. Verify that power and video outlets are in correct locations.
 - 2. Verify that building structure for attachment of equipment mounting devices is in place.

- C. Report in writing to City's project manager any prevailing conditions that will adversely affect satisfactory execution of Work of this Scope. Do not proceed with Work until unsatisfactory conditions have been corrected.
- D. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the City.
- E. Provide required power outlets, low voltage power supplies, interconnecting cables, hardware and equipment for a complete and operable system.
- F. Camera locations are to be reviewed and approved by a City representative, prior to installation.

3.2 INSTALLATION

- A. Install all equipment in accordance with manufactures published instructions. Installation must be done by manufacturer's certified dealer program (if applicable) to assure proper installation and accountability. This includes, but is not limited to the following:
 - 1. All hardware used to secure equipment to racking shall include a nylon or other non-metallic washer or grommet between the screw head and equipment panel to prevent any damage to the equipment.
 - a. Rack mount screws shall be self-centering Philips-head configuration unless specialized tam per-resistant hardware has been specified.
 - b. Screws shall be tightened in such a manner as to allow their removal with common hand tools.
 - 2. Any equipment placed on shelving mounted on an incline of greater than 2 degrees shall be secured to the rack or shelving in such a manner as to prevent movement of the equipment in the direction of the incline. Such fastening shall be done in a manner as to preserve the integrity of the equipment case and chassis, and shall in no way jeopardize warranty coverage of the device. This includes seismic bracing in case of earthquake.
 - 3. All equipment cabling shall be dressed in such a manner as to ensure a neat and clean appearance.
 - 4. Cable break-outs shall be at 90-degree angles from the harness or chase, and all chases shall t parallel to or at 90-degree angles from the rack frame.
 - 5. Cables are to be secured to the rack frames at sufficient intervals to ensure that the weight of the, cable will not contribute to fatigue or early failure of that cable or the device and connector to which it is attached.
 - 6. Sufficient excess cable shall be provided in "service loop locations" to ensure that the cable may be re-connected without requiring the addition of extension pieces.
 - 7. All permanent cabling shall be mechanically numbered in a manner consistent with written system documentation.
 - 8. Wiring for all equipment shall be tie-wrapped so that all connectors in a bundle can be removed and re-installed without the possibility of cross connecting.
 - 9. Where wiring is routed through sheet metal or over frame members, the metal edges shall be covered with flexible grommeting or edge dressing (such as automobile door edge trim).
 - 10. Double-sided foam tape shall not be used to secure any equipment, terminal blocks, or accessory devices. All device mounting shall be of a permanent nature.

- 11. All excess length AC cords are to be tie-wrapped out of the way. Where possible, they shall be routed in a separate bundle a minimum of 6 inches away from any signal or control cable.
- 12. Exposed wires run to wall mounted cameras shall be tie-wrapped to the mount or fed through the tubing mount to present a professional appearance.
- 13. Care shall be exercised at all times to protect City property. For example, ladders shall not be placed against wallpapered or finished surfaces, equipment or furnishings; desks or countertops shall not be used in lieu of ladders.
- 14. On pendant mounted cameras, label each camera on all four sides with three-inch numbers supplied by the Contractor. Numbers shall be stenciled or laminated vinyl in a contrasting color to the camera housing. Camera number shall match and correspond to the camera input number, any on screen numeric identifier and/or printed map provided by the switches and/or multiplexer or DVR. Numbers shall not be placed on lower dome or any area that would obstruct camera viewing.
- 15. Ensure that pendant mounted cameras are hung from stable, vibration free mounting platforms, using guy-wires or other support mechanisms to ensure stability where required. Mount cameras below any suspended lighting to avoid glare or reflection on camera dome and/or lens.
- 16. Perform complete programming of the system, in coordination with the City project manager. Programming shall include, but not be limited to, elimination of duplicate or redundant titling information, synchronization of system clocks, camera sequences, dome presets, salvos and tours. Programming of any system passwords or limiting of accessibility prior to commissioning and training is prohibited.
- 17. City LAN/WAN network connections will be provided by the City.
- B. Power requirements shall be determined by actual equipment used.

C. Ensure that:

- 1. All applicable statutes, ordinances, regulations, license requirements and codes are fully complied with.
- 2. All required permits are obtained.
- 3. All required inspections are conducted.
- 4. All necessary certificates are issued, obtained, and delivered to the City.
- 5. All equipment installations and mounting are in strict accordance with requirements for applicable seismic classification.
- E. Provide required power outlets, interconnecting cables, hardware and equipment for a complete and operable system.
 - 1. Power, 120VAC: As required by codes and standards for the facility.
 - 2. Where conduit is used, a minimum of 40% excess capacity shall be provided for future use
- F. Install cameras in the general vicinity of locations indicated on Drawings at final locations defined by camera location test.
 - 1. Provide 84-inch minimum headroom below cameras and their mountings. Where necessary modify mounting type to maintain clearance, except as noted on drawings. Place cameras so the field of view is not obstructed by any object.

G. All coaxial video connections must be made with crimp-type BNC connectors. Twist-on connectors are <u>not</u> acceptable.

3.3 FIELD QUALITY CONTROL

A. Quality Control: Inspection and testing procedures.

B. Inspection:

- 1. Inspect equipment installation, interconnection with system devices, mounting locations, and mounting methods.
- 2. Verify that units and controls are properly installed, connected, and labeled and that interconnecting wires and terminals are identified.

C. Testing:

- 1. Perform tests and provide test equipment, tools, and personnel required to conduct system tests and inspections.
- 2. Provide an actual demonstration of each system function.
- 3. Conduct system acceptance test upon completion of installation using pre-approved procedures. Test shall consist of system, subsystem, and device level acceptance tests, including software.
- 4. Test for proper time and date tagging of video image when alarm is triggered.
- 5. Prepare all test procedures and submit the procedures for review by the City project manager. Obtain test procedure approval prior to actual system tests.
- 6. Ensure that test procedures confirm each specification statement and manufacturer requirement has been met or exceeded. An actual demonstration of each system function and a simulation of each system failure shall be provided.
- 7. An acceptance test period of thirty days shall begin at the start of the acceptance test. Any system failure during the acceptance test period will suspend the acceptance test. The thirty-day test period will restart when the required repairs have been made and certified.
- 8. Perform all tests in the presence of the City project manager or authorized agent. The City reserves the right to accept any portion or activate any phase prior to acceptance of entire system.
- 9. Provide as-built Record Documents for review prior to final acceptance.

3.4 OPERATING INSTRUCTION

- A. Provide on-site instruction to review the operation of the system and detail any common troubleshooting or maintenance steps that are required to ensure normal operation.
- B. Provide one complete set of equipment operating, installation, and programming manuals that will remain in the installed location. Two complete sets of equipment operating, installation, and programming manuals should be provided, one for the installed location and one for facilities.

3.5 CLEANING AND ADJUSTING

- A. Clean installed items using methods and materials recommended by equipment manufacturers just before conducting acceptance test.
- B. Adjust manual lens irises to meet lighting conditions.
- C. Adjust field of view for each camera per Inspection Service direction.

3.6 TRAINING

A. Provide a minimum of five (5) hours of training for focus and realignment of the cameras and programming and operation of the DVMR and viewing software. Two (2) hours of the training shall be reserved for telephonic support following the initial training session. Training materials including a User Guide to the use of the DVMR must be provided as part of the initial training session.

Part 4 site locations:

- 1. Main Library 585 Franklin Street, Mountain View, CA 94041
- 2. Police & Fire Administration Building 1000 Villa Street, Mountain View, CA 94041
- 3. Emergency Communications Center 1000 Villa Street, Mountain View View, CA 94041

Part 5 equipment locations:

5.1 Main Library:

- A. Head end equipment;
- DVMR's optimum number of DVMRs and number of channels per DVMR for this application to be determined by vendor.
- Switch for networking DVMR's to City LAN/WAN
- Power supplies for DVMR's, monitors, cameras and ancillary devices
- Two (2) LCD flat screen monitors (one per DVMR)

Locate DMVR's, switch, and power supplies in existing rack in first floor computer room. All said components shall include rack mount hardware and be rack mounted. One monitor will be mounted in a visible location at the Library Main Entrance. It will provide a split screen display in real time of the images captured by both CCD cameras focused on people moving through the Main Entrance. One monitor will be mounted in a visible location at the Pioneer Park Entrance and provide a display in real time of the images captured by the CCD camera focused on the people moving through the Pioneer Park Entrance. It is intended that individuals using either of these entrances see themselves on the monitors and recognize that they have been captured on video. Both monitors will include all necessary mounting hardware for application.

B. Camera locations: Thirty-eight (38) new, ten (10) add alternatives

Garage:

- Garage entrance/exit (2) wall mount(replace with new CCD cameras)
- Elevator lobby ceiling mount (replace with new CCD camera)
- South section of garage southwest corner fire exit wall mount (replace with new CCD camera)
- New drive up bookdrop location wall mount (new CCD camera and location)

The following four (4) additional cameras and locations are add alternatives and should be itemized separately in the bid proposal:

- East section of garage southeast corner wall mount and auto pan (replace with new CCD PTZ camera)
- Northwest corner of garage wall mount and auto pan (replace with new CCD PTZ camera)
- Middle area of garage outside southeast corner of elevator room wall mount and auto pan (replace with new CCD PTZ camera)
- South section of garage southeast corner wall mount and auto pan (replace with new CCD PTZ camera)

First floor:

- Administration offices hallway ceiling mount (new CCD camera and location)
- Support services hallway ceiling mount (new CCD camera and location)
- Entrance to Administration area ceiling mount (new CCD camera and location)
- Main restrooms hallway ceiling mount (new CCD camera and location)
- Teen area emergency exit ceiling mount (replace with CCD camera)
- Teen reading room wall or ceiling mount and auto pan (replace with CCD PTZ camera and move to new location for optimum coverage)
- Pioneer Park entrance wall or ceiling mount (new CCD camera and location)
- Main lobby information desk ceiling mount and auto pan (new CCD PTZ camera and location)
- Main lobby entrance (2) ceiling mount (new CCD cameras and location)
- Children services restrooms hallway (2) wall or ceiling mount (replace with new CCD cameras)
- Children services entrance ceiling mount (new CCD camera and location)
- Children services emergency exit to Pioneer Park wall or ceiling mount (new CCD camera and location)
- Children services emergency exit in southeast corner wall or ceiling mount (replace with CCD camera)
- Children services main floor along west wall ceiling mount (new CCD camera and location)
- Children services picture books area wall or ceiling mount and auto pan (replace with CCD PTZ camera and move to new location for optimum coverage)

• Exterior bookdrop outside main lobby entrance – ceiling mount (new CCD camera and location)

The following four (4) additional cameras and locations are add alternatives and should be itemized separately in the bid proposal:

- Media area wall or ceiling mount above children services entrance and auto pan (new CCD PTZ camera and location)
- Exterior area at Pioneer Park entrance wall mount and auto pan (new CCD PTZ camera and location)
- Children services book stack area wall or ceiling mount and auto pan (new CCD PTZ camera and location)
- Browsing collection area wall or ceiling mount and auto pan (new CCD PTZ camera and location)

Second floor:

- Restroom hallway wall or ceiling mount (new CCD camera and location)
- Room #205 wall or ceiling mount and auto pan (new CCD PTZ camera and location)
- Study rooms (2) ceiling mount (new CCD cameras and locations)
- Periodical reading room wall or ceiling mount and auto pan (replace with new CCD PTZ camera and move camera to east side of room for optimum coverage)
- Periodical area emergency exit wall or ceiling mount (new CCD camera and location)
- Periodical area wall or ceiling mount and auto pan (new CCD PTZ camera and location)
- Main hallway from stairway to periodical area ceiling mount (new CCD camera and location)
- Top of stair case ceiling mount (new CCD camera and location)
- Lobby in reference area ceiling mount and auto pan (new CCD PTZ camera and location)
- Reference desk area ceiling mount (new CCD camera and location)
- Non fiction area west side (2) wall or ceiling mount (replace with new CCD cameras and move camera in southwest corner to new location for optimum coverage)
- Reading room area wall or ceiling mount and auto pan (replace CCD PTZ camera and move camera to south side of room for optimum coverage)
- Non fiction emergency exit wall or ceiling mount (new CCD camera and location)

The following two (2) additional cameras and locations are add alternatives and should be itemized separately in the bid proposal:

- Group study room ceiling mount (new camera and location)
- Non fiction area east side wall or ceiling mount (new CCD camera and location)

Note: Some locations have existing cameras. They shall be removed and boxed for City representative to pick up. Any patching / painting will be responsibility of Contractor. It will be acceptable to re-utilize camera cabling if desired. If the cable is found poorly run and/or has reliability issues, it is up to the Contractor to replace with new. Patching and painting should be included in scope of work.

5.2 Police & Fire Administration building:

- A. Head end equipment see Emergency Communications Center
- B. Camera locations: Sixteen (16) new, seven (7) add alternatives

First floor

- Booking hall covering blind spot ceiling mount (replace with new CCD camera and move to new location for optimum coverage)
- Chemical test room ceiling mount (new CCD camera and location)
- Sally port (2) wall mount (replace with new housing and CCD cameras; second camera to be located in northeast corner of sally port)
- Booking/Cell hallway (2) ceiling mount (replace with new housing and CCD camera)
- Interview rooms (4) ceiling mount Must use rugged series dome assemblies which cannot be tampered with (new CCD cameras and locations)
- Hallway to Emergency Communications Center entrance door ceiling mount (replace with new CCD camera)
- Exterior Emergency Communications Center private entrance (replace with new CCD camera)

The following two (2) additional cameras and locations are add alternatives and should be itemized separately in the bid proposal:

- Juvenile detention area ceiling mount (new CCD camera and location)
- Support Services entrance auto pan (new CCD PTZ camera and location)

Second floor

- West lobby (replace with new CCD camera)
- Front counter/Records (replace with new CCD camera)

- Exterior lobby ceiling mount (replace with new housing and CCD PTZ camera with remote control capability and move to corner for optimum coverage)
- East lobby (replace with new CCD camera)

The following five (5) additional cameras and locations are add alternatives and should be itemized separately in the bid proposal:

- Auditorium foyer ceiling mount (new CCD camera and location)
- Exterior Administration entrance wall mount (new CCD camera and location)
- Exterior terrace outside Briefing Room wall mount and auto pan (new CCD PTZ camera and location)
- Exterior terrace outside Lunch Room wall mount and auto pan (new CCD PTZ camera and location)
- Exterior ISD entrance wall mount (new CCD camera and location)

5.3 Emergency Communications Center:

- A. Remove existing DVMR set up. Box up for City representative pick up.
- B. Re-route existing cabling from cameras, remote keyboard & wall mounted monitors to I.T. room beside lunch room. City to provide rack space for mounting new head end components.
- C. Head end equipment:
- DVMR's optimum number of DVMR's and number of channels per DVMR for this application to be determined by vendor. Connect all cameras in AIB and Juvenile Detention/Holding Area to one DVMR and all remaining PD cameras to the second DVMR.
- Switch for networking DVMR's to City LAN/WAN
- Power supplies for DVMR's, monitors, cameras and ancillary devices
- Two (2) LCD flat screen monitors (proposed monitors should be sized appropriately so that a mosaic of all 16 cameras being displayed "live" or during playback will provide a high quality picture of each, viewable from a distance of up to 6 feet away). These monitors will be installed in the Emergency Communications Center at a location directed by the PD Project Manager. The installation of the monitors shall be coordinated with Wright-line, a vendor contracted separately by the City to provide a mounting solution with the existing furnishings in the Emergency Communications Center. Wright-line shall be responsible for all hardware and the actual mounting of the monitors. It shall be the responsibility of the CCTV Project vendor to make all necessary connections to the monitors to insure they are integrated properly into the CCTV system. One monitor will display live video from the PD CCTV system and the other monitor will display live video from the Library CCTV system. Both monitors will require

- new mounting brackets. May use existing power. These shall be remote view from DVMR's for Emergency Communications Center.
- One existing video monitor in Records will remain and must be connected to the new PD CCTV system with the ability to display live video from individual DVMR's or both DVMR's simultaneously.
- One additional LCD flat screen monitor to be placed in the Sergeants' Office is an add alternative and should be itemized separately in the bid proposal. This monitor will be comparable to the monitors placed in Emergency Communications with the actual location to be determined by the PD Project Manager. The monitor will have the ability to display live video from the PD CCTV system from individual DVMR's or both DVMR's simultaneously. The monitor will require new mounting brackets.
- Switch data hub for controlling to DVMR's from remote keyboard.
- D. Replace existing (one) remote keyboard from DVMR with new. Keyboard to be compact in design with complete DVMR control & status, including joy stick for PTZ use. Keyboard shall have switching capability from one DVMR to the other. It shall also have a pig tail cord with plug & data jack mounted underneath dispatch console for unplugging, if desired.

Descriptions for Diagram of Existing/New Camera Locations Police/Fire Administration Building

Camera Placement on First Floor

- 1. Booking Hall. Replace existing camera with one new CCD color camera and adjust from current location for optimum coverage, pointing in the direction as shown on the accompanying diagram, and positioned with lens and resolution so as to record general activity in that area. The camera shall be placed in a dome, designed for use with the ceiling in that area. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. The camera shall be placed in a vandal-resistant housing.
- 2. Chemical Test Area. Install one new CCD color camera in the general location and pointing in the direction as shown on the accompanying diagram, and positioned with lens and resolution so as to record general activity in that area. The camera shall be placed in a dome, designed for use with the ceiling in that area. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. The camera shall be placed in a vandal-resistant housing.

- 3. Sally Port. Replace existing camera with one new CCD color camera in the same general location as the existing camera, pointing in the direction as shown on the accompanying diagram, and positioned with lens and resolution so as to record general activity in that area. Install one additional CCD color camera on the opposite side of the sally port (northeast corner), pointing in a direction to ensure full coverage of the sally port by both cameras. The cameras shall be placed in domes, designed for outdoor use. The domes shall be smoked or mirrored, so as to obscure from casual observation what direction the cameras are facing. The cameras shall be placed in a vandal-resistant housing. All exterior wiring shall be placed in conduit.
- 4. Booking/Cell Hallway. Replace two (2) existing cameras with two (2) new CCD color cameras in the same general location as the existing cameras, pointing in the direction as shown on the accompanying diagram, and positioned with lens and resolution so as to record general activity in these areas. The cameras shall be placed in domes, designed for use with the ceiling in that area. The domes shall be smoked or mirrored, so as to obscure from casual observation what direction the cameras are facing. The cameras shall be placed in vandal-resistant housings.
- 5. Interview rooms. Install four (4) new CCD color cameras in the general locations as shown on the accompanying diagram, and positioned with lens and resolution so as to record general activity in each interview room and the booking photograph station. The cameras shall be placed in domes, designed for use with the ceiling in that area. The domes shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. The cameras shall be placed in tamper proof housings. No exposed conduit may be used in the interview rooms.
- 6. Hallway to Dispatch Center Entry Door. Replace existing camera with one new CCD color camera in the same general location as the existing camera, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person entering the Dispatch Center. The camera shall be placed in a dome, designed for use with the ceiling in the hallway. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 7. Dispatch Center Private Entrance. Replace existing camera with one new CCD color camera in the same general location as the existing camera, pointing in the direction as shown on the accompanying diagram, and positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person entering the Dispatch Center. The camera shall be placed in a dome, designed for outdoor use. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. The camera shall be placed in a vandal-resistant housing. All exterior wiring shall be placed in conduit.

Cameras #8 and #9 are add alternative and should be itemized separately in the bid proposal.

- 8. Juvenile Detention Area. Install one new CCD color camera positioned with lens and resolution to provide optimum coverage of the general activity in that area. The camera shall be placed in a dome, designed for use with the ceiling in that area. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. The camera shall be placed in a vandal-resistant housing.
- 9. Exterior Support Services Entrance. Add one new CCD color camera in this area positioned with lens and resolution so as to record general activity approaching the entrance as well as the adjacent area outside. The camera will have the ability to auto pan. The camera shall be placed in a vandal resistant dome or housing, designed for outdoor use. The dome or housing shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All exterior wiring shall be placed in conduit.

Camera Placement on Second Floor

- 1. West Lobby. Replace existing camera with one new CCD color camera in the same general location as the existing camera, pointing in the direction as shown on the accompanying diagram, and positioned with lens and resolution so as to record general activity in that area. The camera shall be placed in a dome, designed for use with the ceiling in that area. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 2. Front Counter/Records. Replace existing camera with one new CCD color camera in the same general location as the existing camera, pointing in the direction as shown on the accompanying diagram, and positioned with lens and resolution so as to record general activity in that area. The camera shall be placed in a dome, designed for use with the ceiling in that area. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 3. Exterior Lobby. Replace existing camera with one new CCD PTZ color camera and move to corner of front entrance for optimum coverage as shown on the accompanying diagram, and positioned with lens and resolution so as to record general activity in that area. The camera will have the ability to auto pan and be controlled remotely from the Emergency Communications Center including pan movement and zoom capability. The camera shall be placed in a dome, designed for outdoor use. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. The camera shall be placed in a vandal-resistant housing. All exterior wiring shall be placed in conduit.
- 4. East Lobby. Replace existing camera with one new CCD color camera in the same general location as the existing camera, pointing in the direction as shown on the

accompanying diagram, and positioned with lens and resolution so as to record general activity in that area. The camera shall be placed in a dome, designed for use with the ceiling in that area. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.

Cameras #5 though #9 are add alternative and should be itemized separately in the bid proposal.

- 5. Auditorium Foyer. Add one new CCD color camera in the northwest corner of the foyer positioned with lens and resolution so as to record general activity in the area of the double doors leading to the lobby area as well as the double entry doors to the foyer from the front of the building. The camera shall be placed in a dome, designed for use with the ceiling in that area. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 6. Exterior Administration Entrance. Add one new CCD color camera in this area positioned with lens and resolution so as to record general activity approaching the entrance as well as the Administration parking area. The camera shall be placed in a vandal resistant dome or housing, designed for outdoor use. The dome or housing shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All exterior wiring shall be placed in conduit.
- 7. Exterior Terrance Outside Briefing Room. Add one new CCD PTZ color camera in this area positioned with lens and resolution so as to record general activity in the rear parking area of the PD. The camera will have the ability to auto pan. The camera shall be placed in a vandal resistant dome or housing, designed for outdoor use. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All exterior wiring shall be placed in conduit.
- 8. Exterior Terrace Outside Lunch Room. Add one new CCD PTZ color camera in this area positioned with lens and resolution so as to record general activity in the rear parking area of the PD. The camera will have the ability to auto pan. The camera shall be placed in a vandal resistant dome or housing, designed for outdoor use. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All exterior wiring shall be placed in conduit.
- 9. Exterior ISD Entrance. Add one new CCD color camera in this area positioned with lens and resolution so as to record general activity approaching the entrance as well as the street parking of police vehicles. The camera shall be placed in a vandal resistant dome or housing, designed for outdoor use. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All exterior wiring shall be placed in conduit.

There are a total of sixteen (16) cameras required for this phase of the project. There are an additional seven (7) cameras which are to be itemized separately in the bid proposal as add alternatives. Remove all existing cameras, unused camera enclosures, and unused mounting equipment. Insulate, store and seal all unused wires and conductors in final conduit junction box. If there is no final conduit junction box, provide same, mounted securely.

Descriptions for Diagram of Existing/New Camera Locations <u>Library</u>

Camera Placement in Garage

- 1. Install one new CCD color camera near the vehicle entrance, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each driver of each vehicle entering the underground parking garage. The camera shall be placed in a vandal-resistant housing. The housing shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All wiring shall be placed in conduit. The camera and its housing shall not extend below the clearance height noted at the garage entrance. Re-use and/or extend wiring from an existing camera position if possible.
- 2. Install one new CCD color camera near the vehicle exit, positioned with lens and resolution so as to record a readily readable image of each license plate of each vehicle leaving the underground parking garage. The camera shall be placed in a vandal-resistant housing. The housing shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All wiring shall be placed in conduit. The camera and its housing shall not extend below the clearance height noted at the garage entrance. Re-use and/or extend wiring from an existing camera position if possible.
- 3. Install one new CCD color camera in the glass enclosed room surrounding the elevator, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person entering the room through the glass door. The camera shall be placed in a dome, designed for use with the drop ceiling in the room. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. Re-use and/or extend wiring from an existing camera position if possible.
- 4. Install one new CCD color camera near the south-end emergency exit stairwell, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person leaving the underground parking garage using the south-end emergency exit stairwell. The camera shall be placed in a vandal-resistant housing. The housing shall be smoked or mirrored, so as to obscure from casual

observation what direction the camera is facing. All wiring shall be placed in conduit. The camera and its housing shall not extend below the clearance height noted at the garage entrance. Re-use and/or extend wiring from an existing camera position if possible.

5. Install one new CCD color camera at the location of the new drive-up bookdrop located on a raised concrete island across from the diagonal handicapped parking spaces, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person and vehicle including the front license plate as well as the book deposit slot. The camera shall be placed in a vandal-resistant housing. The housing shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All wiring shall be placed in conduit. Conduit to a junction box at this location will be provided by a separate contractor. The camera and its housing shall not extend below the clearance height noted at the garage entrance.

Cameras #6 though #9 are add alternative and should be itemized separately in the bid proposal.

- 6. Install one new CCD PTZ color camera in the east section of the garage near the southeast corner, positioned with lens and resolution so as to record so as to record general activity in the east section of the garage. The camera will have the ability to auto pan. The camera shall be placed in a vandal-resistant housing. The housing shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All wiring shall be placed in conduit. The camera and its housing shall not extend below the clearance height noted at the garage entrance. Re-use and/or extend wiring from an existing camera position if possible.
- 7. Install one new CCD PTZ color camera in the northwest corner of the garage, positioned with lens and resolution so as to record so as to record general activity in the east section of the garage. The camera will have the ability to auto pan. The camera shall be placed in a vandal-resistant housing. The housing shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All wiring shall be placed in conduit. The camera and its housing shall not extend below the clearance height noted at the garage entrance. Re-use and/or extend wiring from an existing camera position if possible.
- 8. Install one new CCD PTZ color camera in the middle area of the garage outside the south east corner of the elevator room, positioned with lens and resolution so as to record so as to record general activity in the south section of the garage. The camera will have the ability to auto pan. The camera shall be placed in a vandal-resistant housing. The housing shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All wiring shall be placed in conduit.

The camera and its housing shall not extend below the clearance height noted at the garage entrance. Re-use and/or extend wiring from an existing camera position if possible.

9. Install one new CCD PTZ color camera in the south section of the garage near the southeast corner, positioned with lens and resolution so as to record so as to record general activity in the south section of the garage. The camera will have the ability to auto pan. The camera shall be placed in a vandal-resistant housing. The housing shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All wiring shall be placed in conduit. The camera and its housing shall not extend below the clearance height noted at the garage entrance. Re-use and/or extend wiring from an existing camera position if possible.

Remove all existing cameras, unused camera enclosures, and unused mounting equipment. Insulate, store and seal all wires and conductors in final conduit junction box. If there is no final conduit junction box, provide same, mounted securely. Label all abandoned wires.

Camera Placement on First Floor

- 1. Install one new CCD color camera in the emergency exit hallway outside the Administration office, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person leaving by that exit. The camera shall be placed in a dome, designed for use with the drop ceiling in the hallway. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 2. Install one new CCD color camera in the emergency exit hallway between Support Services and Receiving, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person leaving by either exit beyond that point. The camera shall be placed in a dome, designed for use with the drop ceiling in the hallway. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 3. Install one new CCD color camera in the hallway leading to the Administration area outside the double glass fire doors, pointing in the direction of the main lobby, and positioned with lens and resolution so as to record general activity in that area. The camera shall be placed in a dome, designed for use with the drop ceiling in the hallway. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 4. Install one new CCD color camera in the area outside the restrooms near the main lobby, positioned with lens and resolution so as to record a readily recognizable and

uniquely identifiable image of each person moving through the "choke point" created by the passageway leading from the restrooms. The camera shall be placed in a dome, designed for use with the drop ceiling in the hallway. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.

- 5. Install one new CCD color camera near the emergency exit outside the Teen Zone Reading Room, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person leaving by that exit. The camera shall be placed in a dome, designed for use with the drop ceiling in the hallway. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. Re-use and/or extend wiring from an existing camera position if possible.
- 6. Install one new CCD PTZ color camera in the Teen Zone Reading Room, positioned on the east side of the room with lens and resolution so as to record general activity in this room and browsing collection area beyond. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding available styles. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. Re-use and/or extend wiring from an existing camera position if possible. This camera shall slowly auto-pan.
- 7. Install one new CCD color camera near the Pioneer Park entrance, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person moving through the "choke point" created by the passageway leading into the Main Lobby from the Pioneer Park entrance. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consider potential glare from outside sunlight at different times of the day as a factor in placement of this camera. Consult with Library Administration and City Project Manager regarding available styles and exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 8. Install one new CCD PTZ color camera in the Main Lobby, near the Information Desk, positioned with lens and resolution so as to record general activity in this room. The camera shall be placed in a dome, and shall be ceiling mounted. Consult with Library Administration and City Project Manager regarding available styles and exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. This camera shall slowly auto-pan.
- 9. Install two new CCD color cameras at the Main Entrance, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person moving through the "choke point" created by the passageway leading into the Main Lobby from the main entrance as well as the hallway leading to the elevator and

Community Room. The camera(s) shall be placed in a dome, and shall be ceiling mounted. Consult with Library Administration and City Project Manager regarding available styles and exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.

- 10. Install two new CCD color cameras in the hallway outside the restrooms located between the Community Room and the Children's Services area, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person as they leave the restrooms or pass through the hallway. The camera(s) shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding available styles and exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. Re-use and/or extend wiring from an existing camera position if possible.
- 11. Install one new CCD color camera in the Children's Services area, facing the double doors leading to the Main Lobby, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person as they enter the Children's Room. The camera shall be placed in a dome, designed for use with the drop ceiling in the room. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 12. Install one new CCD color camera in the Children's Services area, near the double door emergency exit leading outside to Pioneer Park, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person leaving by that exit. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding available styles and exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 13. Install one new CCD color camera in the Children's Services area, near the single door emergency exit, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person leaving by that exit. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding available styles and exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. Re-use and/or extend wiring from an existing camera position if possible.
- 14. Install one new CCD PTZ color camera in the Children's Services area, near the Information Desk, positioned with lens and resolution so as to record general activity in this room. The camera shall be placed in a dome, designed for use with the drop ceiling in the room. Consult with Library Administration and City Project Manager regarding

exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. This camera shall slowly auto-pan.

- 15. Install one new CCD PTZ color camera in the Children's Services area, in the Picture Books Room, positioned on the southeast side of the room with lens and resolution so as to record general activity in this room and the open area of the Children's Services area beyond. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. If the existing dome cannot be used, provide a suitable dome. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. Re-use and/or extend wiring from the existing camera position if possible. This camera shall slowly auto-pan.
- 16. Install one new CCD color camera at the location of the exterior bookdrop located adjacent to the Main Entrance, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person using the bookdrop as well as the book deposit slot itself. The camera shall be placed in a weatherproof, vandal-resistant housing. The housing shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. All wiring shall be placed in conduit. Conduit to a junction box at this location will be provided by a separate contractor.

Cameras #17 though #20 are add alternative and should be itemized separately in the bid proposal.

- 17. Install one new CCD PTZ color camera in the Media area above the Children's Services entrance, positioned with lens and resolution so as to record general activity in this room. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. This camera shall slowly auto-pan.
- 18. Install one new CCD PTZ color camera near the entrance from Pioneer Park, positioned with lens and resolution so as to record general activity in the area outside the entrance. The camera shall be wall mounted outside of the entrance and placed in a dome. The camera shall be placed in a weatherproof, vandal-resistant housing and all wiring shall be placed in conduit. Consider potential glare from outside sunlight at different times of the day as well as low light conditions during darkness as factors in placement of this camera. Consult with Library Administration and City Project Manager regarding exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. This camera shall slowly auto-pan.

- 19. Install one new CCD PTZ color camera in the Children's Services book stack area, positioned with lens and resolution so as to record general activity in this room. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. This camera shall slowly auto-pan.
- 20. Install one new CCD PTZ color camera in the Browsing Collection area, positioned with lens and resolution so as to record general activity in this room. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. This camera shall slowly auto-pan.

Remove all existing cameras, unused camera enclosures, and unused mounting equipment. Insulate, store and seal all unused wires and conductors in final conduit junction box. If there is no final conduit junction box, provide same, mounted securely. Patch holes in drywall and cover any exposed conduit boxes with blank faceplates that either match the wall color (preferred), or match the color of the electrical faceplates in that area.

Camera Placement on Second Floor

- 1. Install one new CCD color camera in the area outside the restrooms, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person moving through the "choke point" created by the passageway leading from the restrooms. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 2. Install one new CCD PTZ color camera in Room 205, positioned with lens and resolution so as to record general activity in this room. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding available styles and exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. This camera shall slowly auto-pan. Re-use and/or extend wiring from the existing camera position on the outside wall of Room 205 if possible.
- 3. Install one new CCD color camera in the Large Study Room, positioned with lens and resolution so as to record general activity in this room. The camera shall be placed in a dome, designed for use with the ceiling in the room. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.

- 4. Install one new CCD color camera in the Small Study Room, positioned with lens and resolution so as to record general activity in this room. The camera shall be placed in a dome, designed for use with the ceiling in the room. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 5. Install one new CCD PTZ color camera in the Periodical Reading Room, in the existing dome (if possible), positioned on the east side of the room with lens and resolution so as to record general activity in this room and the open area of the Periodical area beyond. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. If the existing dome cannot be used, provide a suitable dome. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. Re-use and/or extend wiring from the existing camera position if possible. This camera shall slowly auto-pan.
- 6. Install one new CCD color camera near the emergency exit between the Periodical Back File and the Periodical Reading Room, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person leaving by that exit. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 7. Install one new CCD PTZ color camera in the Periodical area along the south wall, positioned with lens and resolution so as to record general activity in this area. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. This camera shall slowly auto-pan.
- 8. Install one new CCD color camera in the hallway from the Periodical area, pointed in the direction of the long row of computers, positioned with lens and resolution so as to record general activity in this area. The camera shall be placed in a dome, designed for use with the ceiling in the room. Consult with Library Administration and City Project Manager regarding exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 9. Install one new CCD color camera in the second floor lobby area, pointed in the direction of the open staircase, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person as they come up the stairs to the second floor. The camera shall be placed in a dome, designed for use with the ceiling in the room. Consult with Library Administration and City Project Manager regarding exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.

- 10. Install one new CCD PTZ color camera in the lobby, near the Reference Desk, positioned with lens and resolution so as to record general activity in this room as well as the Non-Fiction Collection area. The camera shall be placed in a dome, designed for use with the ceiling in the room. Consult with Library Administration and City Project Manager regarding available styles and exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. This camera shall slowly auto-pan.
- 11. Install one new CCD color camera in the lobby area, pointed in the direction of the Reference Desk, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person in the immediate area of the Reference Desk. The camera shall be placed in a dome, designed for use with the ceiling in the room. Consult with Library Administration and City Project Manager regarding exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 12. Replace existing two cameras in Non-Fiction Collection area with new CCD color cameras, with the camera in the northwest corner of the room positioned with lens and resolution so as to record general activity along the west side area, and the camera in the southwest corner or the room positioned with lens and resolution so as to record general activity along the south side of the room. The cameras shall be placed in domes, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding available styles and exact placement. The domes shall be smoked or mirrored, so as to obscure from casual observation what direction the cameras are facing. Re-use and/or extend wiring from the existing camera positions if possible.
- 13. Replace existing camera in Reading Room area with new CCD PTZ color camera, positioned on the south side of room with lens and resolution so as to record general activity in the room as well as the area beyond. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding available styles and exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing. Re-use and/or extend wiring from the existing camera position if possible. This camera shall slowly auto-pan.
- 14. Install one new CCD color camera near the emergency exit in the south end of the Non-Fiction Collection area, positioned with lens and resolution so as to record a readily recognizable and uniquely identifiable image of each person leaving by that exit. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.

Cameras #15 and #16 are add alternative and should be itemized separately in the bid proposal.

- 15. Install one new CCD color camera in the Group Study Room, positioned with lens and resolution so as to record general activity in this room. The camera shall be placed in a dome, designed for use with the ceiling in the room. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.
- 16. Install one new CCD color camera in the Non-Fiction Collection area in the southeast corner of the room, positioned with lens and resolution so as to record general activity along the east side of the room. The camera shall be placed in a dome, and may be wall mounted or ceiling mounted. Consult with Library Administration and City Project Manager regarding exact placement. The dome shall be smoked or mirrored, so as to obscure from casual observation what direction the camera is facing.

Remove all existing cameras, unused camera enclosures, and unused mounting equipment. Insulate, store and seal all unused wires and conductors in final conduit junction box. If there is no final conduit junction box, provide same, mounted securely. Patch holes in drywall and cover any exposed conduit boxes with blank faceplates that either match the wall color (preferred), or match the color of the electrical faceplates in that area.

6.0 Responsibility of Contractor

6.1 EXAMINATIONS AND INVESTIGATION BY CONTRACTOR

- 6.1.1 Prior to submitting a bid, contractors shall examine all documents relating to this project and visit the job site to ascertain the nature of the work and the character of the job site. Contractors shall become familiar with the contractual requirements, project limitations, various aspects of the work, physical conditions and surroundings of the job site.
- 6.1.2 Contractors shall include in their bids a sum sufficient to cover the costs of doing the work under the existing site conditions and project requirements. By submitting a bid for the project, the contractor declares that he or she has thoroughly investigated the job site, examined all related project documents and is familiar and satisfied with the nature, character and condition of the project site, contractual requirements, project limitations and the various aspects of this project. The City will not consider any claims for compensation whatsoever on account of the contractor's failure to

fully investigate and examine the project requirements and job site conditions as required above.

- 6.2 Contractor shall assign a Supervisor or Project Manager to the City's account in order to establish and maintain a consistent working knowledge of key issues and City personnel. This person shall be the main contact for all scheduled and non-scheduled services.
- 6.3 Contractor must attend pre-construction meetings as specified by the City to ensure the scope of work is understood, and to resolve any questions regarding scheduling, specifications, materials, construction, workmanship, inspection and acceptance, responsibility of the contractor and responsibility of the City.
- 6.4 Contractor shall provide all materials, tools, equipment, and labor to complete each job in a safe and timely manner. Contractor shall provide an adequate number of skilled workmen who are thoroughly trained and experienced in the necessary crafts for the proper performance of the work.
- 6.5 All materials shall be new and of a quality equal to that specified. At the City's option, the source of supply of each material shall be approved by the City before delivery is started. Only materials conforming to the requirements of these specifications shall be used in the work.
- 6.6 No subcontractors will be recognized as such, and all persons engaged in the work of construction shall be considered as Contractor's employees. Contractor will be held responsible for subcontractor's work, which will be subject to the provisions of the contract. Before any work is started, Contractor shall provide a written statement giving the names of all subcontractors and description of work to be subcontracted.
- 6.7 All contractor's employees and subcontractors assigned to City must demonstrate they are United States citizens or have a legal right to work in the United States.
- 6.8 Contractor shall use care to not interfere with the daily operations of the site or site occupants. The contractor shall minimize the noise impact during office hours.
- 6.9 Contractor shall provide informational warning signs at the entrance to each area to adequately advise the public of the work being done. If

- necessary, the Contractor shall provide for all traffic control personnel and equipment.
- 6.10 Contractor shall maintain sufficient safeguards against the occurrence of accidents, injuries or damage to any person or property. Barricades shall be placed around all work area. Carpet floor and all construction circulation, including flooring from the elevator, and all access points shall be protected by clear plastic sheets or 15 pound building paper.
- 6.11 Contractor shall maintain at the construction site adequate warning and construction signs for the safety of the public. Additional signs for the safety and convenience of the public shall be furnished and maintained by contractor as directed by the City's Facilities Division.
- 6.12 Any lane closures performed by the Contractor for this project must comply with the guidelines in the "Work Area Traffic Control Handbook" (WATCH) published by the American Public Works Association. All contractors' employees must wear an lime green safety vest while working in traffic right-of-way areas.
- 6.13 Contractor shall be responsible for any defacement or damage to the existing site as a result of Contractor's work and shall be responsible to restore it to its original condition at contractor's expense. The repair or replacement work shall be of equal or greater quality and in appearance to prior condition and to the satisfaction of the City. The repair or replacement method used shall be approved by the City's Facilities Manager.
- 6.14 The City assumes no responsibility for loss of or damage to materials or equipment owned or operated by the contractor, his agents or employees. All work damaged due to vandalism or any other cause prior to acceptance of the work by the City shall be repaired or replaced by the contractor at the contractor's own expense.
- 6.15 Contractor shall comply with all applicable State and local laws, ordinances, codes and regulations. All safety orders, rules and recommendations of the Division of Industrial Relations of the State of California, applicable to all the work performed under this contract, shall be obeyed and enforced by the contractor.
- 6.16 Contractor shall possess and maintain a current General Contractors and/or Trade License issued by the State of California, as well as a City of

- Mountain View Business License at all times during the term of this agreement.
- 6.17 Contractor's employees' shall wear a company uniform clearly identifying the company and shall present a neat and clean appearance at all times. All vehicles shall be clearly identified with either an equipment number or company logo.
- 6.18 Contractor shall give the City three (3) working days notice prior to commencement of any work.
- 6.19 Contractor shall post "Temporary No Parking" signs indicating the date and time that no parking will be in effect at least twenty-four (24) hours, and no more than forty-eight (48) hours, in advance of work.
- 6.20 Unless otherwise specified, Contractor shall perform work between the hours of 7:00 AM to 3:30 PM. Monday through Friday, excluding City holidays. Times shall be discussed at the pre-construction meeting and shall become part of the scope of work thereafter.
- 6.21 SITE APPEARANCE: The contractor shall maintain a neat appearance at the work site throughout the construction period. At the end of each shift, and upon completion of work, contractor shall clean up the entire work area of all trash, rubble, rags, containers, materials and equipment resulting from work. Debris shall be disposed of concurrently with its removal in accordance with all Federal, State, and local requirements. If stockpiling is necessary, the material shall be stockpiled in the garage at approved locations and disposed of later at the direction of the Facilities Maintenance Supervisor.

6.22 NOISE CONTROL

- 6.22.1 Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without a muffler.
- 6.22.2 Any equipment used on the project shall not produce a sound level exceeding 55 dB(A) when measured by a sound level meter equal to or better than an ANSI Standard S 1.4 1971 Type 2 noise level meter at any location on any residentially used property. At

night, between 10:00 p.m. and 7:00 a.m., this sound level shall not exceed 50 dB(A).

6.23 DUST AND AIR QUALITY CONTROL

Dust control shall be performed in accordance with Section 5 10, "Dust Control," of the City Standard Provisions and Section 10, "Dust Control," of the State Standard Specifications and the following requirements.

6.24 SITE CLEANUP

If the contractor fails to perform the final cleanup work to the satisfaction of the Facilities Maintenance Supervisor, the City will withhold the final payment until the contractor complies with the requirements. If the final cleanup is deemed unsatisfactory, the contractor shall remedy the work within two (2) working days after receipt of rejection notice from the City. If the contractor fails to remedy the work as directed, the City may, at its own option, hire a third party to perform the work and deduct the cost of the clean up work from the final payment due the contractor.

6.25 NONPOINT SOURCE POLLUTION CONTROL

In compliance with the State and Federal regulations on construction storm water management and non-point source pollution control, no pollutants will be allowed to enter the storm drainage system. The Contractor shall be responsible for containing and removing any wastes from the Contractor's construction operation using the appropriate Best Management Practices (BMP) and shall properly dispose of the waste from the site. The Contractor shall be responsible for cleaning catch basins as solid and liquid waste materials originating from the Contractor's operation enter the storm drain. Violation of this provision shall cause the City to issue a stop-work notice and take necessary actions to require the Contractor to correct and comply with the regulations. All costs related to the stop-work action and corrective work to come into compliance shall be fully borne by the Contractor. The cost of preventative actions required of the Contractor should be included in other items, and no additional compensation will be allowed.

6.26 OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) REQUIREMENTS

All work shall be performed in a safe, workmanlike manner. Work performed and methods and equipment used shall be in accordance with the prevailing State and Federal Occupational Safety and Health Act (OSHA) and applicable portions of Section 7 of the Standard Specifications. Costs from delays and losses due to operations not in conformance with these Acts, Specifications or stoppages by OSHA Inspectors or the Engineer as a result of such nonconformance shall be solely borne by the Contractor. The Contractor's attention is directed to Section 7.1.09 of the Standard Specifications.

6.27 INVOICES

- 6.27.1 Contractor shall bill the City upon completion of work. All invoices shall provide detailed line item descriptions, quantities, and unit prices for all parts, materials, special equipment/rigging, and all labor.
- 6.27.2 Unless otherwise stated and approved, all labor rates quoted shall be full compensation for all services performed under this agreement.

 No addition compensation will be made for mileage, travel time, field drawings, estimates, billing, follow up warranty inspections and repairs, or customer services.
- 6.28 All contractor employees and subcontractor employees must be enrolled in the "Live Scan" fingerprint program; and the Department of Justice shall determine whether any individuals have been arrested or convicted of a violent or serious felony or has a pending criminal proceeding for a felony as defined in Section 45122.1 of the CA Education Code. This report must be received and accepted by the City from the Department of Justice prior to contractor employees and subcontractor employees beginning work. No contractor, contractor employees, subcontractor or subcontractor employees shall commence or continue work without clearance from the Department of Justice.

The Police Department may impose additional security measures or require further information from employees and subcontractor employees who will be working in or around the police facility.

6.29 Responsibility of City

6.29.1 The City shall manage this project, visit the site, observe progress of work, and report back to contractor on performance and adherence to the specified requirements.

- 6.29.2 The City shall be responsible for removal of any City equipment obstructing the work area unless specifically discussed at the preconstruction meeting. Should any equipment remain in the work area, contractor shall use extreme caution to avoid causing any damage to equipment while working around such equipment.
- 6.29.3 The City will administer the Live Scan program through the Santa Clara County Sheriff's Department and other regional law enforcement agencies and the Department of Justice and monitor the employee's status throughout the term of the agreement. In the event the employee is not eligible to work pursuant to Section 45122.1, the contractor will be notified by the City in regard to the employee's ineligibility to work. All information obtained by the Department of Justice will be classified as Confidential and is for the information of the approved Originating Agency Number (ORI) representative by the City of Mountain View.
- 6.29.4 The forms may be obtained from Mary Anne Helfrich (650 903-6700) in the Mountain View Police Department. Each applicant shall then make an appointment with and bring the completed application form to the Santa Clara County Sheriff's Office or Stanford University Sheriff's office to have fingerprints taken. The clearance process takes around two (2) weeks. After the clearance is given, the workers should make appointment with Mary Anne for a photo session and the Mountain View Police Department will issue photo ID badges to the workers.
- 6.29.5 While they are on the premises, workers shall display photo ID badges at all times. Workers without badges will be requested to leave the premises.
- 6.29.6 All required fees related to the applications will be paid by the City. All other travel costs and time associated with Security Clearance shall be the responsibility of the contractor and shall be included in the bid.

7.0 PROPOSER'S REFERENCES

The Proposer is **required** to provide a minimum of 5 references where work of a similar size and nature was performed within the 5 years. This will enable the City of Mountain View to judge the responsibility, experience, skill, and business standing of the Proposer.

REFERENCES

Client Name:	Contact Name:
Address:	Phone Number:
	Fax Number:
Date of Project (when was work performed) Describe what product or service was provided:	Email address:
Client Name:	Contact Name:
Address:	Phone Number:
	Fax Number:
Date of Project (when was work performed) Describe what product or service was provided:	Email address:
Client Name:	Contact Name:
Address:	Phone Number:
	Fax Number:
Date of Project (when was work performed) Describe what product or service was provided:	
Client Name:	Contact Name:
Address:	
Date of Project (when was work performed) Describe what product or service was provided:	Email address:
Client Name	Contact Name
Client Name:	
Address:	Fax Number:
Date of Project (when was work performed) Describe what product or service was provided:	Email address:

8.0 BID SCHEDULE

Lot 1 Library Project

Item	Qty	U/M	Description	Unit Price	Ext Price
1	38	ea.	New Cameras	\$	\$
2		ea.	DVMR's (optimum number of DVMR's TBD by vendor)	\$.\$
3 .	2	ea.	Monitor	\$	\$
4	2	ea.	Software Seat Licenses	\$	\$
			Net Materi	als Total	\$
			8.25 % Sales Tax		\$
			Materials Grand	<u> Fotal</u>	\$
5	24	ea.	Installation of New Cameras	\$	\$
6	12	ea.	Installation of Replacement Cameras	\$	\$
7	28	ea.	Demo/Removal of old cameras/equipment	\$	\$
			Net Labor	Total	\$
			Materials (Grand Total	\$
			Lot 1 Library Project Gr	and Total	.\$

Library ADD/Alternate Items

<u>Item</u>	<u>Qty</u>	U/M	Description	Unit Price	Ext Price
8	10	ea.	New Cameras	\$	\$
9	6	ea.	Installation of New Cameras	\$	\$
10	4	ea.	Installation of Replacement Cameras	\$	\$

Lot 2 Police Department Project

<u>Item</u>	Qty	U/M	Description	Unit Price	Ext Price		
1	18	ea.	New Cameras		\$	\$	
2		_ea.	DVMR's (optimum number of DVMR's TBD	by vendor)	\$	\$	<u>.</u>
3	2	ea.	Monitor		\$	\$	
4	. 2	ea.	Software Seat Licenses		<u>\$</u>	\$	
				Net Ma	nterials Total	\$	
	-			8.25 % Sales	Tax	\$	· ·
,				Materials Gra	nd Total	\$	
5.	6	ea.	Installation of New Cameras	÷	\$	\$	
6	10	ea.	Installation of Replacement Cameras		\$	\$	
· 7	10	ea.	Demo/Removal of old cameras/equipment		\$	\$	
				Net La	bor Total	\$	
				Materi	als Grand Total	\$	
			Lot 2 Police	Department Pr	roject Grand Tot	al \$	

Police Department ADD/Alternate Items

<u>Item</u>	Oty	U/M	Description	Unit Price	Ext Price
8	7	ea.	New Cameras	\$	\$
9	1	ea.	Monitor	\$	\$
10	7	ca.	Installation of New Cameras	\$	

Project Grand Total (Lots 1 & 2) \$